WASTE OIL RECOVERY

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY, ENVIRONMENT, AND SAFETY ISSUES AFFECTING SMALL BUSINESS

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HOUSE OF REPRESENTATIVES

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WASTE OIL RECOVERY

THURSDAY, FEBRUARY 11, 1982

House of Representatives, Subcommittee on Energy,
Environment, and Safety Issues Affecting Small
Business, Committee on Small Business,
New York, N.Y.

The subcommittee met, pursuant to notice, at 9:10 a.m., in room 305, Federal Building, Manhattan, N.Y., Hon. Berkley Bedell (chairman of the subcommittee) presiding.

OPENING STATEMENT OF CHAIRMAN BEDELL

Mr. Bedell. The subcommittee will come to order. I am Congressman Bedell, chairman of the Subcommittee on Energy, Environment, and Safety Issues Affecting Small Business, House Committee on Small Business.

Representative Guy Molinari, who is a member of the subcommittee, is largely responsible for these hearings, and it is my pleasure to be here with Guy as we look into this issue.

We are looking at the issue of waste oil recovery. It is a subject which is important because of its implications for energy conservation, environmental protection, and the public health.

I would like to start off this morning by placing in the record a paper prepared for this subcommittee by the Congressional Research Service of the Library of Congress.[1] This report notes that each year we use about 3 billion gallons of lubricants in the United States, with about half of that amount ending up as waste oil.

A 1980 study by the Environmental Protection Agency indicates that about 29 percent of the 1.5 billion gallons of waste oil each year is disposed of directly to the environment, with no treatment or secondary use. Fully 50 percent of the waste oil was being burned as a fuel oil, while only 7 percent, or 100 million gallons, was being re-refined into lubricants, according to the EPA study.

The safe disposal of waste oil is a problem. Frequently, the lubricants pick up traces of lead and other contaminants in the course of their use. Reportedly, some unscrupulous people have been illegally disposing of PCB's and other toxic substances by blending them in with waste oil, where they are difficult to detect. This practice has the potential for causing tremendous environmental and public safety problems.

The burning of waste oil as a fuel represents a secondary use for the product and, if environmental safeguards are properly observed, clearly is preferable to letting the resource go to waste or allowing it to pollute the land and water. Although waste oil is a low quality fuel, it does serve to displace other petroleum products and thus helps to reduce our consumption of oil.

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[1] See app. A.

Here in the United States, only about 3 percent of our lubricant market consists of recycled oil. In West Germany, the comparable figure is almost 20 percent; in Italy it is 13 percent. Here in the United States we recover, in any fashion, only about 70 percent of our waste oil while the West Germans seem to be able to recover over 90 percent of their waste oil. I cite these figures to show that we still have a long way to go in this country.

We are conducting this hearing in New York City at the suggestion of Congressman Guy Molinari, a member of our committee. Guy is a relatively new member of our subcommittee but he has already earned our respect for his interest and his enthusiasm.

The subcommittee is aware of recent news reports suggesting that significant amounts of contaminated waste oil have been sold for use as boiler fuel in the Metropolitan New York City area. We know that waste oil that was improperly disposed of in this region some years ago continues to raise health and safety concerns.

So, in addition to considering the broad question of what can be done to improve our performance in the area of waste oil recovery, we also will be interested in learning more about these local problems, to better understand what steps must be taken to prevent such things from happening again.

The waste oil recovery industry is composed almost entirely of small businesses, and we are pleased to note that our witness list today includes several businessmen who have taken time away from their firms to testify this morning. We also have with us this morning representatives of various local, State, and Federal agencies who have dealt with the waste oil issue.

We do have a full witness list this morning and we have promised to be done by noon, so all witnesses are reminded that we ask them to limit their initial remarks to 10 minutes or less. The hearing record will be open for you to include prepared statements or additional material.

Since the chairman is going to have to catch an airplane and leave here just a few minutes before noon, if I do have to leave I will ask Mr. Molinari to be sure everyone does have an opportunity to be heard.

Guy, did you have a statement?

OPENING STATEMENT OF HON. GUY V. MOLINARI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. Molinari. Yes, indeed, thank you, Chairman Bedell.

The subject of today's hearing, waste oil recovery, is a timely and important topic. A number of recent events have brought to light the problem that waste oil, often contaminated by toxic chemicals, is being disposed of in this city in ways that are harmful to the health and welfare of our citizens.

Perhaps the most dramatic exposition of this problem was made on the ABC News magazine show "20/20", which documented a particular instance of waste oil contaminated with toxic wastes, such as PCB's, being sold as fuel oil to apartment buildings in the city, and then burned to the detriment of the health of the residents of the buildings.

Unfortunately that exposé is not the only report of such practices. There have been reports of widespread dumping of waste oil, also possibly contaminated with toxic substances, in the Brookfield landfill on Staten Island in my congressional district and, indeed, in other landfills in the city of New York as well.

Further investigations made by my office in connection with the Chelsea terminal toxic waste site, again in my district, indicate that what was uncovered by "20/20" may be just the tip of the iceberg. Against the grizzly backdrop of these reports I welcome today's hearing as a step in the direction of figuring out what can be done to discourage further consequences of this kind. This hearing represents the first formal involvement by the U.S. Congress in these events, and it can establish a record for concerned Members of Congress, including this Member in particular, to take whatever actions on the Federal level that would be appropriate in dealing with the problem.

I hope that the witnesses today will not hesitate to suggest ways in which Federal measures could be helpful to them. The witnesses scheduled to speak today basically fall into two groups. First, we are going to hear from several sectors of the waste oil industry, an industry that is not well known, but that is key to this problem. There are a number of areas I hope we shall get into. What is the makeup of the industry? How can proper disposal of waste oil be encouraged, and improper disposal of toxic contaminants be discouraged? How feasible is it to recycle and refine waste oil? What can be done to encourage more recycling, and what can be done to assure that waste oil, whether recycled or burned, does not contain harmful substances?

One factor that can contribute a solution to the problem is that businesses in the waste oil industry are generally small businesses. As members of the Small Business Committee are so fond of saying, and rightly so, small businesses are the most innovative and most creative sector of our economy. Provided the incentives are there, small businesses will find ways to provide needed services. In this case we must make sure both that the incentives are in fact there, and that those incentives encourage environmentally sound methods of handling waste oil.

Second, we shall hear from representatives of Government agencies who have had some contact with particular incidents in the city. I would hope to learn their impressions of how widespread the problem is, what tools are available to combat it, and what further tools might be helpful in making inroads against it.

Perhaps the most frightening thing about these recent reports is that we are facing an invisible threat to our health. It could be in the air we breathe, in the water we drink, in the ground we live on. I hope this hearing will help make the problem of contaminated waste oil more visible and help outline potential solutions to it. I want to express deep appreciation to Chairman Bedell who went out of his way in order to accommodate us in having this hearing here today.

I think it is an important issue. I think it is something we are going to be concentrating on in the Congress in the very near future. I am truly hopeful that the experts that we have in this room and the testimony we are going to hear are going to have some impact on the legislative initiatives that we are going to encounter in the Congress.

I might add something that was not prepared. But typical of what happens in this very important field is that last Monday, a week ago Monday in this very room, we had a press conference where I accused the State's department of environmental conservation of mishandling the cleanup of a dump at Chelsea terminal. It was based on information furnished by my staff. And the next day, Commissioner Flacke, who is Commissioner of the department of environmental conservation, counterattacked and accused me of being reckless and irresponsible, that the charges were untrue, and that the dump was cleaned up in a clean and decisive way and in a safe way. It is interesting to note that last Friday at 11 o'clock, a spokesman for DEC called the press and said that in response to their inquiry that week, last week, Texaco, the owner of the property, admitted that the waste oil that had been carried out of the site may have contained PCB's.

On Thursday last, the State's department of health tested samplings and indeed confirmed the fact that PCB's were involved in that waste oil trucked to New Jersey.

So, in a period of 72 hours the commissioner of environmental conservation did a complete about-face. That illustrates to us the seriousness of this problem, and somebody is going to have to face it. We have to find out what level of government is best suited to handle this problem.

Mr. Chairman, I want to thank you, and I want to thank the subcommittee staff, Marc Rosenberg on the majority side, who has done a magnificent job, and Jim Kulikowski on my right who is minority counsel and Greg Friberg on my staff in Washington, for their hard work in organizing this hearing.

I also want to express my sincere appreciation to those of you who are going to testify for taking time out of a busy schedule to help us in this very important subject. Thank you very much.

Mr. **Bedell.** Before we start I thought I would go over with you our proposal as to how we are going to try to get as much testimony as possible today. Our proposal is that we would operate primarily with panels of two or three people. The schedule we have temporarily set up—and if there is any serious problems with it, we would like to hear from you folks if it would mean you would have trouble trying to be here at the time we have you scheduled. We are proposing to hear first from Eric Kaston, deputy commissioner of the New York City Department of Environmental Protection and Paul Casowitz, deputy commissioner, Office of Resource Recovery of the New York City Department of Sanitation.

Next we would propose to have a panel of Thomas Allen, associate director, division of air resources, New York State department of environmental conservation, and George Tyler, assistant commissioner for environmental management, New Jersey department of environmental conservation.

Third would be a panel of Ralph Bombardiere, New York City Association of Service Station Associations, and James Wells, New York Oil Heating Association.

Fourth would be a panel of three consisting of Irving Berkowitz, Association for Processors of Liquid Resources, Inc.; George Booth III, Booth Oil Co., Buffalo, N.Y.; and Donald Donahue, American Oil & Supply Co. of Newark, N.J.

Finally we would hear from James Marshall, Director, Office of Public Affairs, U.S. Environmental Protection Agency, region II.

Does that schedule give anybody any difficulty here as we have our hearings?

A **Voice**. Congressman, I may. We are scheduled for that fourth panel.

Mr. **Bedell**. Who are you?

Mr. **Sherman**. I am Michael Sherman, representing the Independent Lubricant Manufacturers Association along with Mr. Donahue. He has an appointment in Newark, N.J., at 11:30 this morning. I am just worried that he might not be able to make that appointment if we stick to that schedule.

Mr. **Bedell**. Is he here now?

Mr. **Sherman**. Yes, sir.

Mr. **Bedell**. Why don't we see how our panels proceed.

Yes?

Mr. **Wells**. My name is Jim Wells. I had specifically asked if I could speak relatively early because I, similarly, have another meeting. I have to leave here no later than 11 o'clock. I had specifically asked if I could speak around 9 o'clock, at the start of the hearing.

Mr. **Bedell**. Yes, we had a whole lot of people ask us that. That is one reason I went through this. You need to leave by 11?

Mr. **Wells**. Yes, sir, I left my statement with the stenographer. If I am not here he will have it for your record.

Mr. **Bedell**. We will see if we can work things in so we can take care of you.

Mr. **Wells**. Fine.

Mr. **Bedell**. We will start with our first panel then of Mr. Eric Kaston, deputy commissioner, New York City Department of Environmental Protection, and Paul Casowitz, deputy commissioner, Office of Resource Recovery, New York City Department of Sanitation.

PANEL CONSISTING OF ERIC KASTON, AND PAUL CASOWITZ

TESTIMONY OF ERIC KASTON, DEPUTY COMMISSIONER, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. **Kaston**. Good morning, my name is Eric Kaston, deputy commissioner for the New York City Department of Environmental Protection.

On my right is Paul Casowitz, deputy commissioner from the department of sanitation, and also in charge of resource recovery, to be specific. I want to thank the subcommittee for having these hearings today, giving us the opportunity to come before you and address ourselves to the problem which you have correctly deemed as a serious one.

Part of the problem before us is that the local government does not know exactly how serious the problem is. There have been many allegations made about the improper use of this oil for either burning, or improper disposal. It has also been used in some instances as a way of disposing hazardous materials.

Part of the problem we face as a local government is that this problem does not know local government boundaries. The problems are interstate, the problems are regional, and the problems, in fact, in some cases are national.

Among the things we would like to see happen very much, I think would be, from the Federal EPA, a national waste oil standard, particularly in the cases of burning and disposal. Among the other things we would also like to see would be some work by the subcommittee in the area which I believe the chairman touched on, economic incentives for re-refining. I think that is an area we have to go into. Together with the enforcement tool, we also have to hold out some positive ways to deal with the problem. One of the things I think the committee should be well aware of, and that we are well aware of, is to what extent we get better enforcement, we don't want that to necessarily drive people underground so we find the problem 10 years from now.

I think we would be kidding ourselves to do that. Again, I think we would need a national standard on this because it is not just a local problem. We have been doing some investigations to assess the problem. It is too early to discuss the results of that right now. We have been working with the New York Oil Heaters Association who have been very forthcoming in their assistance to us and technical expertise in this field.

We have also been working with members of the subcommittee and their individual staffs, and we look forward to continuing it.

Mr. **Bedell**. Thank you very much, Mr. Kaston.

Mr. Casowitz.

TESTIMONY OF PAUL CASOWITZ, DEPUTY COMMISSIONER, OFFICE OF RESOURCE RECOVERY, NEW YORK CITY DEPARTMENT OF SANITATION

Mr. **Casowitz**. Eric Kaston's role is as a regulator, someone whose responsibility is to insure the health and safety of the citizens of the city. I speak for an agency that performs a necessary function, in addition to the cleaning and collection of solid waste, we also operate solid waste disposal facilities. At the present time the city is heavily dependent upon landfill disposal. Almost half the city's waste is disposed in Mr. Molinari's district. Part of my job is to reduce that dependency upon landfills by developing over the next decade, a system of resource recovery facilities for solid waste.

As an operator of a solid waste facility, waste oil poses a problem to us. Before 1979, the department of sanitation routinely and openly used waste oil as a means of keeping dust down on the roads in landfills. To the best of our knowledge, we do not think that practice created a serious health hazard simply because the volume used was so small in relation to the volume of the total waste disposed.

Preliminary samplings done of groundwater around the landfills have not indicated unusual concentrations of toxic substances, one that would not be expected from a solid waste landfill.

Recently we have learned that in addition to the oil that was disposed—that is oil we knowingly accepted and recorded—certain individuals within the department of sanitation, acting illegally, allowed the dumping of what is believed to be toxic substances.

This information came to us as a result of testimony given at the trial in Pennsylvania. While I am not going to speak about the investigation, later today the department of sanitation will be issuing a press release from the other results of one of those investigations and the disciplinary actions taken against one of our employees. We can and have made it a policy no longer to take liquid wastes. We are not in a position to certify and verify what is in those wastes, nor are the facilities designed for handling toxic materials.

We clearly have to do a little more with respect to our security and enforcement to insure that our regulations are carried out. But that does not stop the problem. There are two areas where we can use help from the Federal Government and from the State. The first is to establish standards for testing. The evidence of illegal dumping at New York City landfills has justifiably alarmed our citizens. We find to our chagrin that there is not a whole lot known about what are the health impacts, what is the proper testing protocol to carry out, and what are the standards. It is very hard to respond to the citizens who have read in the paper that illegal dumping went on, and you don't know where it went on or whether it went on or how much or what kind of material.

We are undertaking a program of testing groundwater. When we complete that testing, we will have some sense of what the impact on the overall environment was. But there are no standards. There is nothing we can point to. I think this is important. People are going to look for an independent and objective standard, to come in and say this landfill is or is not acceptable under the standards, and what corrective action, if any, needs to be taken at the landfills.

We are almost bootstrapping it. We are bootstrapping it by talking to EPA, DEC and numerous consultants who have the expertise in the business. But there is no standard. The second really goes beyond the department of sanitation, and just reiterates what Eric Kaston said. It does no good to promulgate a regulation and tighten up and force people underground.

It amazes me the trouble individuals go to surreptitiously bring waste oil to New York City landfills. There is technology available that can make use of that material. There is technology available that will allow for the safe incineration of that material, possibly energy recovery. Methods have to be found to provide for a safe method of disposal.

Thank you.

Mr. **Bedell**. I thank you very much, Mr. Casowitz.

Mr. **Molinari**. Do you have an extra copy of the press release that you mentioned?

Mr. **Casowitz**. I called my press office this morning. The trial, the commissioner's decision was rendered late last night. The press release will be issued, and I will certainly furnish copies to the subcommittee.

Mr. **Bedell.** We would appreciate it if you would mail us one. Without objection, it will be entered as part of the hearing record.[2]

Mr. **Casowitz.** No problem.

Mr. **Bedell.** Mr. Molinari.

Mr. **Molinari.** Paul, while I don't want to get into any area of law enforcement, because I know there are a number of investigations going on, but with respect to the Pennsylvania case and the dumping that took place in various landfills, do I understand you correctly that you still have not been able to identify the exact location of where the oil was dumped?

Mr. **Casowitz.** I don't have that information yet. Now that the investigation has gone to a certain step, certainly with regard to the department's administrative hearings, I will again speak to the investigators to see what they can tell me. There is an ongoing investigation and as you have indicated, there is not much I can tell you about it.

Mr. **Molinari.** No; I don't want to know about the investigation.

Mr. **Casowitz.** I will tell you it was at the Brookfield landfill; now the question is, where within the Brookfield landfill? We will be doing additional, in fact, quite extensive water testing at Brookfield and around Fresh Kills to identify the degree of ground water pollution from the landfill and the concentrations of any toxic substances.

Mr. **Molinari.** I have reason to believe in the very near future, perhaps a matter of days, we will be able to identify exactly where the dumping occurred. The question then comes up, what steps would you be able to take once you know exactly where it was dumped?

Mr. **Casowitz.** What would you do?

Mr. **Molinari.** What would I do, yes.

Mr. **Casowitz.** You are getting at what was almost a plea. If I know where it was dumped I will draw core samples. I will then test those samples. The next question will be, what do you do? There is no standard. I mean, we will form a judgment. We will talk it over with EPA and form a judgment as to the potential of future contamination, what the impact of that contamination would be, what is the cost of removal. And we will have to make a judgment and stand on that.

It would certainly help if there was a standard on this. Someone with credibility could be brought in from outside the department to indicate what was proper. We will have to face that problem; I can't skirt around it.

Mr. **Molinari.** What is the policy of your department with respect to oil tank cars being permitted into landfills?

Mr. **Casowitz.** The policy of the department is not to take any oil waste. So, the only oil tankcars that are going into the landfill should be cars delivering fuel for the equipment at the landfill.

Certainly, today, any liquid waste being taken into the fill is, in addition to being in violation of law, certainly in violation of the department's policy.

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[2] See app. B.

Mr. MOLINARI. Would you mind describing for us what kind of manifest system you have to document the vehicles that enter and leave, and the load that they might be carrying?

Mr. CASOWITZ. OK. Vehicles that come in pass through a gatehouse where they pay a fee. The fee is determined by the nature of the truck, its size, and the nature of the waste that it is taking in. The tanktruck should be just turned away at the gate. Now a problem comes up. What if a barrel or a drum is concealed within a truck, buried in the waste? We follow a policy that, if the drum is spotted as the truck dumps, we try to isolate those drums, and then have the company that dumped them pick them up. There is a severe warning; if it happens again, their license will be suspended. During my tenure in sanitation over the last 3 years I know instances where we have followed up on investigations. Sometimes it is an empty drum, maybe a cardboard container which contained a dry chemical and it was used as a waste disposal container. But the most distinguishing thing which will come out, I also think in the next few days, is that at least one individual in the department of sanitation permitted certain substances to be disposed of in the fill. That is the disturbing thing. That points to a problem that we have, which is of tightening up our own security and our own audit control.

That is a management problem. There is a record which is kept of trucks by type, and indeed, we have a record over the years 1974 through 1979 which indicates recorded oil trucks that came in, by truckload. We don't know if they were full trucks or not, which spread oil. There is no secret about that; that was a common practice both in the landfill and in many rural areas, to keep dust down on dirt roads, and was stopped because of concern over PCB and other toxic substances.

Mr. MOLINARI. What kind of interaction is there between the sanitation department and your own DEP, the city of New York, the State, and Federal EPA? What kind of contacts do you have with them, or do they have with you?

You might want to make specific reference to this problem which has arisen about the illegal dumping, if you could.

Mr. CASOWITZ. Well, all three agencies, city DEP, State DEC, and U.S. EPA, have all given us cooperation in responding on this illegal dumping. I do not think I am saying something that any of those agencies would contradict when I say that there is a limited number of tests that can be done. In New York City we do have one advantage. We are not drawing our drinking water from ground water. That is a major advantage we have, so that pollution of the ground water, while certainly something that should be avoided because of its environmental impacts, the health impacts are reduced as they would be in a region where the aquifer was used for drinking.

So, most of our testing goes to determine the gross impact on the environment, and trying to make a judgment on what, if any, corrective actions can be taken for past dumping. There is also a perceptional role. And that is the public demands assurances. Have you done the tests that should be done for us? And we turn to DEC, DEP, and EPA for that, and to lend some credibility to our statements. We shouldn't be the agency coming forward and certifying our own fills. That is just not right. There should be an independent entity. The public has a right to that.

Eric, do you want to add anything to that?

Mr. KASTON. Yes, I would like to add a couple of things to that. One, I would like to clarify Paul Casowitz's statement about ground water, which is essentially correct. The New York City water supply system does come from upstate surface systems and we are constantly monitoring what goes into that water.

Mr. MOLINARI. Before you leave that, I can recall some hearings when we had a water shortage last year. Some city officials talked about the number of leaks, and they were extensive, in the lines carrying city water. So, isn't it a possibility that, if you have contaminants leaching into the ground, that it could find a point of entry into one of those leaking areas?

Mr. KASTON. In fact, there were two issues I think, that were talked about at the onset of the drought. The first was water leaks from the two major water tunnels carrying water into the city. We have no evidence that that is the case, although there were some people who used these leaks as an argument for the further construction of the third water tunnel, which obviously the department is a great advocate for.

We do not think that at the moment there is a danger in terms of either tunnels one or two. In terms of the immediate system, the distribution system that brings water to your house or mine, we have undertaken an extensive program over the last year using some fairly sophisticated leak detection equipment, with which we can pinpoint where leaks are. We have no evidence that there is any leaching back into the water supply system itself.

Occasionally we do have grit stirred up. That would be sediment in the bottom of the pipe itself which is stirred up after we have either turned off or closed an area.

What I was going to say about the ground water situation in particular is that Jamaica Water Supply Co., which is a private company operating in southeastern Queens and parts of Nassau County is a ground water system, and we, DEC, State, and city health are constantly monitoring that system. They do have some chloride problems of natural salt water in the region. We have no evidence of some of the chemical horrors we have seen in other places, and I do not think the sanitation landfills are in a particular point to impact on that system, at least as we currently see the situation.

The other thing I would add is in terms of sanitation. Sanitation as a department and we as a city are obviously faced with a problem Paul Casowitz has described very well. We are in a position of offering technical assistance to sanitation, either when requested or when we can help them or have a suggestion. Again, the problem is as Paul Casowitz said, we are still determining the extent of the problem. And then we are going to have to come up with answers and make the judgments he spoke about.

Mr. MOLINARI. You have a number of incinerators in the city?

Mr. KASTON. Municipal incinerators?

Mr. MOLINARI. Yes. How many do you have, approximately?

Mr. CASOWITZ. We are operating three city incinerators. We also estimate that some 3,000 tons of waste is being incinerated at various private incinerators. I believe there are also incinerators for handling certain toxic materials in the hospitals, primarily laboratory wastes.

Mr. **Molinari**. One of the most serious problems we have in dealing with toxic waste is it is introduced into the atmosphere. It is bad enough when it is put into a landfill, but it is much worse when it is put into an incinerator because, first, you are introducing it into the atmosphere where it can do harm to the person breathing it. Second, in the case of PCB's, I understand the heating of PCB's makes the toxicity and danger of PCB's even greater, depending on the temperature at which it is burnt. I am wondering what steps if any you are taking to monitor that aspect of it, because according again to the "20/20" television program segment, one of the problems is that they were burning it in apartment houses.

It would seem to me you might want to watch your own incineration process to be sure that doesn't occur. Is there any monitoring of that taking place now?

Mr. **Kaston**. The first point I would like to make is that one of the best known disposal methods for PCB's is incineration if done at the appropriate temperatures, as you cite, and appropriate controls. We have responded to complaints or particular instances where people have raised a problem to us, and have not found it. OK; that is not to say that it doesn't exist. As I said before, part of what we are trying to determine is the nature of the problem. Part of the investigation we are doing now is the PCB contents of fuel oils. As I said to you before, I think what would be helpful is a national standard. We all need a fingerprint of what normal oil looks like. It may be that certain solvents can be appropriately disposed of when mixed with waste oil if we can determine they don't pose a problem. There are others that should obviously not be disposed of by burning.

So, I think we are still in a learning stage. Technically we are trying to assess whether there is such a problem right now.

Mr. **Molinari**. You are not suggesting that the temperature at your incinerators is high enough to destroy PCB's?

Mr. **Kaston**. No. I am talking about cement plants, such as the cement plant——

Mr. **Molinari**. Yes.

Mr. **Casowitz**. I think the problem at a city incinerator is much less than a landfill. First, the area is much easier to police, a building, albeit a large building, a building that has a single disposal area. Landfills like Fresh Kills are 3,000 acres. That is a major piece of territory. The other aspect is the very operation of the incinerator speaks against disposal. Any drums would clearly show up. The crane operator has to feed the furnaces. The oil would cause a thermal overload on the incinerator. We also charge much more at the incinerators than at the landfill. So, there is just no reason to put it in there. I think the case you were referring to, where individual companies were mixing contaminated oil with oil delivered to residential customers; there was an obvious incentive. They were disposing of a toxic material and getting paid for it.

Mr. **Molinari**. Do you use oil at all in your incinerators to help with the burning process?

Mr. **Casowitz**. No, the garbage burns by itself. At least one of our incinerators actually heats the building with the heat generated from burning the garbage.

Mr. **Molinari**. Just one or two more questions. On the question of disincentives, which I think is a very legitimate question, I am going to just go afield for one quick moment because the topic was raised with me the other day. This is by the carting industry who pointed out that because of the substantial increases in what fees are going to be charged to those who dump, commercial carters perceive a dropoff of customers, and the material itself will be dumped illegally in the future. Just in passing, I wanted to bring that to your attention. It is something that runs along the same lines. I understand the fees have been increased to such a point where this could conceivably be a serious problem.

Mr. **Casowitz**. Let me just speak very briefly to that. Obviously, any business wants to keep its costs down. That just might make sense. The carting industry has experienced a dramatic increase in waste disposal costs, not just in New York City but throughout the whole country. When we speak about the economics of resource recovery, it is driven by two things: An increase in the price of energy. We went from oil at less than $3 a barrel to oil at $30 to $40 a barrel. While we have a temporary respite, most economists see the trend is at least going to track with general inflation. We see in Westchester fees of as high as $35 per ton to dispose of solid waste, as compared to some fees in New Jersey which are as low as $3 a ton for solid waste disposal.

So, the carting industry is a basic issue here. Does the user of the service pay for it or should it come from the general tax revenue. I think you know what the state of the general tax revenue is. In terms of illegal dumping, the biggest volume of commercial carting serving businesses carries a significant nature. We don't find a lot of illegal dumping. A truck who illegally dumps, who picks up from his stores, has in effect left his calling card. It is not difficult to go through the waste, pick up the business stationery, go back and find out who the carter is.

Mr. **Molinari**. Do you have enough personnel to do that?

Mr. **Casowitz**. It is not a problem. What is a problem is construction and demolition waste which has no signature. The prices of construction and demolition waste have not risen that dramatically. But if you look at illegal dumping you will find it is not commercial waste picked up from stores and businesses, but it is primarily construction debris.

Mr. **Molinari**. Just one last question. We know there have been some pronouncements coming from Washington that perhaps some problems could be better handled at local levels, that is, at a State level, or, conceivably, at the municipal level. In this field of the environment and contamination by toxic wastes, what would your comment be on that subject? I would be very interested because you do represent the city of New York which is the largest city in the Nation. And it is a matter of great concern to some of us, I think to most Members of Congress, whichever side of the fence they may be on.

I would certainly welcome your comments on that.

Mr. Kaston. Without commenting on the general programs I think my mayor made himself clear about some of the problems. In terms of this problem, as I said before, it is one that knows no geographic limitations. It is a problem that has to be dealt with, I feel very strongly, on a Federal level, and on a State level, and obviously with local and State assistance.

The point I am trying to make is that we have got to have national standards and national involvement in this program, where the national involvement takes the form, as I said, in terms of helping to create a legitimate industry that is going to handle this. It has to come in the form of a national standard for these fuels and their burning.

As we said before, even if the States are involved, and the States in this northeast region have been trying to work together, I am aware in tracking down this problem we still have different standards among the States. You cannot enforce, necessarily, multiple State and local regulations, but need a uniform manifest system and things like that. In fact, the biggest hook we have right now in terms of finding PCB's in any of this oil is under the TSCA law, a Federal law.

The hook we have locally is sulfur in the local law. Last year we did some investigations by stopping trucks coming into the city from New Jersey in particular, and did not find contravention of our law.

I am not going to pretend that all oil truckers in New York City are clean, but it means when we stop trucks, with the resources we have, we may not find the problem as these companies are very sophisticated. We may be able to deal with it on a local level but some of the leadership has to come at the Federal level.

Mr. Molinari. So if national standards were adopted, do you think the problem could be dealt with on the State level? I am primarily concerned with enforcement.

Mr. Kaston. Were the States to have resources to do that? That is always a loaded question. I do not know the answer to that. I know New York State has been looking to put additional resources into this issue. Whether it is adequate or not, I know a large part of the resources have been federally funded particularly a strikeforce looking at toxic materials in the Hudson area which I think you are aware of. I know they are going to fund that in next year's budget. I think as the problem comes more to our attention there may be more State resources. I do not think, however, that this is going to be enough.

Mr. Molinari. I have no further questions.

Thank you very much.

Mr. Bedell. Thank you, Mr. Molinari.

Mr. Kaston, you said, "we" are trying to study the problem so we know better what needs to be done. Who did you mean?

Mr. Kaston. In cooperation with State DEC we are taking a limited amount of samples. The bottleneck in this area is laboratory capacity. We have had some conversations with USEPA about providing us some additional laboratory capacity to analyze these results. I would really describe it as a local, State and USEPA effort to get a handle on the problem. We are going to be taking samples and doing some investigations, continuing some that are already existing over the next month, before the end of this heating season.

Mr. Bedell. Are you trying primarily to find out how serious the problem might be if you have pollution, or is it how much pollution is there? Or is it both?

Mr. Kaston. Well, it is a combination of both. What we are trying to find out is how much of a problem it is. We don't doubt for a second some may be going on. The question is how much; we have not yet seen evidence of it. We are trying to pin down particular places where it may be happening, in terms of people who may be the distributors or handlers of this. How much of a problem it is within individual residences, apartment buildings, for instance. Also, to some extent the investigation may just act as a general deterrent.

Mr. Bedell. My question was not clearly worded I guess. Are you trying to find out what the effects are if there is such contamination, and how it affects people and that sort of thing? Or are you trying to find out how you check to see if the contamination is there?

Mr. Kaston. The latter.

Mr. Bedell. It would seem to me if it was the former, it should be something EPA should be doing, and it is a national problem rather than just a local problem.

Mr. Kaston. That is right. I wouldn't presume for us to have that expertise.

Mr. Bedell. I get the impression from your testimony that you are somewhat frustrated by the fact that EPA is not moving forward quicker to give you some help as far as standards are concerned and this sort of thing. Do I interpret you two correctly?

Mr. Kaston. I think a national standard for waste oil would be helpful. The frustration is, again, the knowledge of the extent of the problem.

Well, we have some excellent technical people. I can't speak highly enough of them. I am not sure we have the leadership developed, the groundbreaking effort that may be needed here. So, yes, we would certainly welcome that standard.

Mr. Bedell. So, you are frustrated with the fact that EPA is not moving forward to give you help on these standards and so on? I am not trying to put words in your mouth. Just answer yes, or no.

Mr. Kaston. No; I think the problem would be eased if we had a national standard.

Mr. Bedell. You are not sure it would be easier?

Mr. Kaston. Oh, I know it would be easier if we had a national standard.

Mr. Bedell. I presume so also.

We have had landfill problems across the country. As far as I know there has been limited concern as far as the waste oil problem is concerned. That has apparently been brought to light here in this area. Would you expect that is a problem in other places? That simply no one has looked at it yet? Or would you expect you are unique and there are some reasons why this would only tend to be true in the Metropolitan New York City area?

Mr. Kaston. I wouldn't say we are unique at all in terms of having this problem. It may be that as New York City is so densely populated, and we have such a large heating demand given the way the city is configured, it may be easier for it to get lost within the confines of New York City than in a smaller community. I wouldn't say it was a locally limited problem however.

I think we as government have a responsibility when putting standards on legitimate business people to do their job and do it correctly, that we try as best we can to deal with the illegal competition, who may be undercutting them. This is not a local problem.

Mr. **BEDELL**. Well, I thank you very much for your testimony. Is Mr. Allen here now?

Mr. **ALLEN**. Yes, I am.

Mr. **BEDELL**. Is Mr. Tyler here?

Mr. **TYLER**. Yes, I am.

Mr. **BEDELL**. Before you come up, what are your time problems, Mr. Tyler?

Mr. **TYLER**. I have to be in Princeton at noon.

Mr. **BEDELL**. How long does that take?

Mr. **TYLER**. About 1½ hours.

Mr. **BEDELL**. So you need to be finished by 10:30, too. The committee has a real problem, Mr. Donahue. We will try to do the best we can. I guess we had better go ahead and take Mr. Allen and Mr. Tyler as we had originally anticipated.

Mr. Wells.

Mr. **WELLS**. Yes, sir.

Mr. **BEDELL**. Do you have somebody else that could speak for you if you have to leave?

Mr. **WELLS**. No, sir, I shall wait for a while longer, thank you.

Mr. **BEDELL**. We are doing our best to get everybody on but we have some real problems here.

Mr. **ALLEN**. Thank you, Mr. Chairman.

PANEL CONSISTING OF THOMAS ALLEN AND GEORGE TYLER

Mr. **MOLINARI**. Before we start, do any of you have prepared statements?

Mr. **TYLER**. I have a somewhat prepared statement. We will submit copies of it to the subcommittee probably by the close of business today or sometime tomorrow.

Mr. **BEDELL**. You are Mr. Tyler?

Mr. **TYLER**. I am George Tyler. I am accompanied by Keith Onsdorff. Keith is chief of our department's office of enforcement.

Also with me is Edward Londers, assistant director for enforcement in our division of environmental quality. And John Perves, one of the department's staff attorneys.

Mr. **BEDELL**. Thank you. And Mr. Allen. You didn't have prepared testimony, did you, Mr. Allen?

Mr. **ALLEN**. No.

Mr. **BEDELL**. Do you want to proceed first, Mr. Allen?

TESTIMONY OF THOMAS ALLEN, ASSOCIATE DIRECTOR, DIVISION OF AIR RESOURCES, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Mr. **ALLEN**. I have about a 4-minute opening statement.

Mr. **Bedell**. Perfect; the only thing that would be better would be a 2-minute one.

Mr. **Allen**. My name is Thomas Allen. I am associate director for the division of air resources with the New York State Department of Environmental Conservation. I would like to take a few minutes just to tell you what the division of air resources is, thinking about in terms of waste oil and the use of waste oil as fuel.

The question should waste oil be refined or used as fuel is a multidisciplinary question. I will discuss the air pollution issues associated with the use of waste oil as fuel.

First I must say that re-refining waste oil when possible is the best approach in our view. Re-refined oil can be used once, and it can be used over and over again. However, using waste oil as fuel is a one-time-only shot. Once it is burned, it is gone. We are concerned about the indiscriminate use of waste oil and solvents as fuel. The potential for the emission of a wide and unknown range of air pollutants exists with the uncontrolled burning of these wastes.

Many of the pollutants can be toxic. On the other hand, many waste oils and solids can be acceptable fuels at specific locations. The problem is to identify these wastes and locations where they can be used as fuel. The solution we propose is to prohibit the sale or use of waste oils and solvents for fuel without a special review and air pollution control permit. In addition, we will establish maximum limits on fuel oil for contaminants such as PCB's, lead, chlorine, chrome and so on. These limits will allow the identification of fuel oil that has been blended or cut with waste liquids. Thus an enforcement avenue has been created by the fuel sampling. The review of application to use waste oil and solvents as fuel will probably include an analysis of the waste to identify constituents of the waste, and resulting air pollutants: an air quality assessment employing dispersion models to evaluate ground impacts of air pollutants, a demonstration of the combustion efficiency to insure proper combustion of the waste fuel, and a monitoring program to consist of one or more of the following: fuel sampling, stack sampling, process monitoring, onsite monitoring, and selected ambient monitoring.

This will allow facilities such as large utility boilers and cement mills that are capable of using waste fuels to do so and eliminate the general use of waste oil and solvents as fuel. By allowing the legitimate use of waste fuels, the flow of these wastes will be directed toward acceptable users and reduce the enforcement problem.

The sale and use of these waste fuels is an interstate problem. New York and New Jersey are discussing the development of similar air regulations for waste oil and solvents as fuel. A consistent approach on the part of both States will lead to more complete control of the problem. More care on the part of the waste generator and handler is needed to insure that waste streams are not mixed.

Our experience is limited, but it indicates current collection practices frequently result in the contamination of waste acceptable for use as fuel by those that are not. The result is a waste stream that is not dependable as a fuel source. The vast range of waste oils and solvents and potential air pollutants is a problem we are just beginning to understand. Much more research is needed in the area of sampling procedures, combustion evaluation and safe ambient levels. The EPA should take the lead in these areas and provide general guidance and direction to the States.

In conclusion, the re-refining of waste oil, when possible, is the best approach. Re-refining minimizes air quality impacts and converts the waste into a usable product. It is realized, however, that some waste oils and solvents can and will be used as fuel. Therefore, we are proposing to develop regulations to control their use and minimize air quality impacts.

I would like to thank you for the opportunity.

Mr. Bedell. Thank you very much, Mr. Allen. We will go ahead and hear from you, Mr. Tyler.

TESTIMONY OF GEORGE J. TYLER, ASSISTANT COMMISSIONER FOR ENVIRONMENTAL MANAGEMENT, NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. Tyler. Thank you.

Thank you, Congressman Bedell and Congressman Molinari. I apologize in advance for not being as brief as Mr. Allen.

Mr. Bedell. Is that microphone turned on?

Mr. Tyler. I guess not. You missed my apology for not being as brief as Mr. Allen in advance.

I am George Tyler, assistant commissioner for environmental management and control of the New Jersey Department of Environmental Protection. I am delighted to be here this morning to discuss waste oil recovery and I would like to begin by stating that we are very encouraged that you are seeking a solution to what we consider a most serious environmental problem.

New Jersey views the combustion of waste oil, especially adulterated waste oil as a significant problem. The adulteration of fuel oil is likely to expand as other unsound outlets for the flow of hazardous wastes are sealed. In addition, continually escalating fuel prices provide economic incentives for disposing of hazardous materials in waste oils. We believe government has the responsibility to manage the burning of waste oil in a way that protects the air we breathe. Accordingly, New Jersey has set in motion a program we feel will help prevent the environmental abuses involving waste oil. The total amount of waste oil generated in New Jersey by motor vehicles, aviation, oilspills, and other sources is not precisely known. However, it is estimated that approximately 24 million gallons of used oil are generated each year. Since 1978 New Jersey has considered waste oil to be a hazardous waste and has required manifesting of waste oil shipments. Since that time we have also licensed waste oil recovery facilities as hazardous waste recovery plants. As as result we have gathered substantial information on the waste oil industry.

The facilities we have licensed typically use processes which separate water and solids from waste oil by filtering and thermal treatment. These rudimentary processes were never designed to filter out the toxic components which naturally occur in oil itself and appear in increasing concentrations after oil is first used. In addition, a growing environmental consciousness on the part of our citizens and our industry coupled with the economic forces I mentioned earlier have accelerated the growth of waste oil recycling. Taken together, these factors have resulted in increasing use of waste oil as a fuel and have generated growing concern by those of us in New Jersey charged with protecting environmental quality.

Even more critical than the growing use of waste oil itself is the fact that our investigations have found deliberate attempts to exploit the hazardous waste disposal problem by the commingling of other hazardous waste with waste oils. Department sampling has shown abnormally high levels of PCB's, chlorinated solvents and other materials in waste oils. Our investigations as well as those conducted by New Jersey's division of criminal justice, have verified that hazardous wastes have been deliberately blended with waste oils and sold as fuel on the open market. The fuel oil marketplace provides an easily accessible path for unscrupulous individuals who handle hazardous wastes to use waste oil as a disposal medium.

This can be undertaken by a generator at his plantsite, by a collector or hauler, a waste haul facility operator or a distributor who buys from a legitimate waste oil reprocessor and has the opportunity to mix waste oil with other toxic wastes. The high cost of proper disposal makes it economically enticing to dispose of wastes in fuel instead of paying high costs for disposal. Unethical individuals can make exorbitant profits by passing wastes off as a fuel. Potential for abuse exists at any point where fuel is sold. I don't mean to imply that all waste oil recovery operations engage in such fraudulent activities; not by any means. Waste oil recovery properly handled is a vital part of our energy conservation and environmental control programs. The technical background to this problem is somewhat complex. I was asked in advance by staff to go into it in some depth, hence I am trying again to keep it to a minimum but I will be a little longer than the other speakers.

Crude oil is not chemically well defined as a substance. But a complex mixture containing literally thousands of compounds including hydrocarbons, sulfur, oxygen, nitrogen compounds, and metallic bearing compounds. Thus, crude oil and fresh, refined oil contains substances of concern. For example, excessive levels of sulfur in oil cause a pervasive air pollution problem. When emitted to the atmosphere sulfur dioxide is a pollutant of prime importance; it has been linked to reduced visibility and a precursor of acid rain.

Thus, an unadulterated fresh re-refined oil is a concern to us from an air pollution point. Waste oil is of greater concern. Most used automotive and industrial oils contain more significant quantities of contaminated newly refined oils. These contaminants are often highly toxic and persist in the environment over long periods of time.

In addition, waste oil samples in New Jersey often have a low Btu value or contain large amounts of moisture, solids or other noncombustibles which decrease effective operation of fuel burning equipment. This results in a higher than normal level of incomplete combustion, and an increase in emissions of harmful contaminants. Clearly even without intentional commingling with other waste, waste oil is of great concern. When other hazardous wastes are deliberately blended in, the potential risk to human health is far more severe. New Jersey has developed a three-tiered regulatory approach to deal with this problem, and the problem of waste oil when it is properly used as a fuel.

First, we have listed waste oil as a hazardous waste. Second, we require that all waste oil reprocessing facilities, as part of their licensing application, submit a waste analysis plan to sample and analyze the material they will treat. Third, we are developing a standard for fuel oil sold or used in the State. As I stated, since 1978 we have been regulating waste oil as a hazardous waste. This means that waste oils must be properly manifested if they are transported, stored or treated in our State. The department has recently proposed at a public hearing that this hazardous waste classification be made permanent, and many of the comments we received at that hearing generally favored this regulatory approach.

We will make a final decision on this issue in the near future. The proposed listing classifies various categories of waste oils and requires continued use of New Jersey's manifest system. The manifesting program has provided much information to my department. Nevertheless, there are hundreds of violations of our manifest rules, by generators, transporters, and treatment facilities. In some instances there has been an outright refusal to comply with our requirements. Thus I stress that any effort to regulate waste oil by a State government will only be effective as part of a larger scale effort to assure proper management of hazardous waste in general.

Such effort will require a severe commitment to develop a comprehensive commitment to waste management problems. New Jersey has made precisely such a commitment. Our efforts to properly manage waste in New Jersey have dramatically escalated. Legislatively we have enacted State Senate bill S. 1300 to facilitate the siting of first-class environmentally sound hazardous waste treatment facilities. Also signed into law recently were amendments to the State's Solid Waste Management Act and our Spill Compensation and Control Act, which has civil penalties for improper waste disposal, make criminal certain improper waste disposal practices and permit use of our oilspill fund for cleaning up hazardous waste sites. More importantly at the State level we have seen the hazardous waste bond issue for $100 million approved by the voters this past November. At the Federal level we have lobbied long, hard, and successfully for the passage of Federal Superfund to augment the State money available for cleanup.

Administratively, my department has established a division of hazard management to handle our waste cleanup spill response and emergency response activities. Despite shrinking budgets, operating funds for this division were nearly doubled this past year. Even more impressive from a fiscal viewpoint, the department's budget for the regulation of hazardous waste generators and treatment facilities has been increased nearly sixfold for the current fiscal year. Extensive new regulations were adopted governing New Jersey generators, transporters, and haulers, as well as treatment and storage facilities, and our department's pioneering manifest system was completely overhauled and modified. In addition, we have established a hazardous waste strike force to better coordinate the investigatory work by the Department of Environmental Protection, New Jersey Division of Criminal Justice, USEPA and

U.S. Attorneys Office in Newark. Thus, I believe it is fair to say that New Jersey has made a major commitment in the hazardous waste management area.

Before I digressed into our commitment in hazardous waste management in general I was talking about our three-tiered approach. The second tier of our regulatory scheme will require waste oil facilities, recovery facilities to submit to the department a waste analysis plan for the oils they reprocess. New requirements for these plans are only now being finalized. But generally we will require each facility to sample every load of incoming waste, and then analyze a representative sample of its tanks roughly twice each month. These facilities will be permitted to handle waste oils. However, they will be prohibited from accepting other hazardous wastes until the facility demonstrates to the department's satisfaction that it can properly treat these materials. Adulterated and incompatible materials will thus be prevented from surreptitious inclusion in the fuel oil stream. This permitting process will regulate those facilities which reprocess waste oils. It will not however regulate the entire fuel oil distribution and transportation system. For this reason the department is proposing a third tier of regulation.

We are currently developing a new air pollution control rule to set limits on various parameters of fuel oil. Regulations will define commercial fuel oil as that which is within the limits of the enumerated parameters.

Any fuel oil which does not meet the promulgated standards will be considered a hazardous waste and regulated accordingly.

The parameters to be utilized will be the following:

One, ash content.

Two, flash point.

Three, bottom solids and water (B.S. & W.).

Four, sulfur.

Five, lead.

Six, polychlorinated biphenyls (PCB's).

Seven, total chlorine.

Eight, possibly cadmium and chromium.

Specific limits of these parameters have not yet been established, since we have not yet proposed the regulation formally or held a public hearing. The limits will be set at levels to insure that the mixing of harmful chemicals into waste oils can be prevented. This will not result in contaminant-free waste oil, but greatly enhance the quality of waste oil sold as fuel. The department will be sampling and analyzing waste oil sold or used in the State. This in combination with studies being conducted nationally will provide information to support the development of additional fuel quality standards. The parameters will apply to anyone who sells, offers for sale or uses oil in New Jersey. All will by law have to comply with these standards.

One word of caution. The department's regulatory program to insure that fuel in New Jersey is of high quality will not provide a solution for other States. In fact, the more New Jersey enforces its standards we developed, the more we will see the use of contaminated waste oils elsewhere. Cooperation of the neighboring States is essential since the problem is one we view as national in scope.

States with inadequate capabilities to develop standards may be at a severe disadvantage in preventing this abuse and find the problem compounded, as other States, like New York and New Jersey, step up enforcement. This was in fact our experience when New Jersey developed a standard for sulfur in fuel oil. As we strengthened early pollution control enforcement efforts, marketing of high sulfur fuel oil increased in other States. There is no reason to believe this will not happen again when we consider toxic compounds.

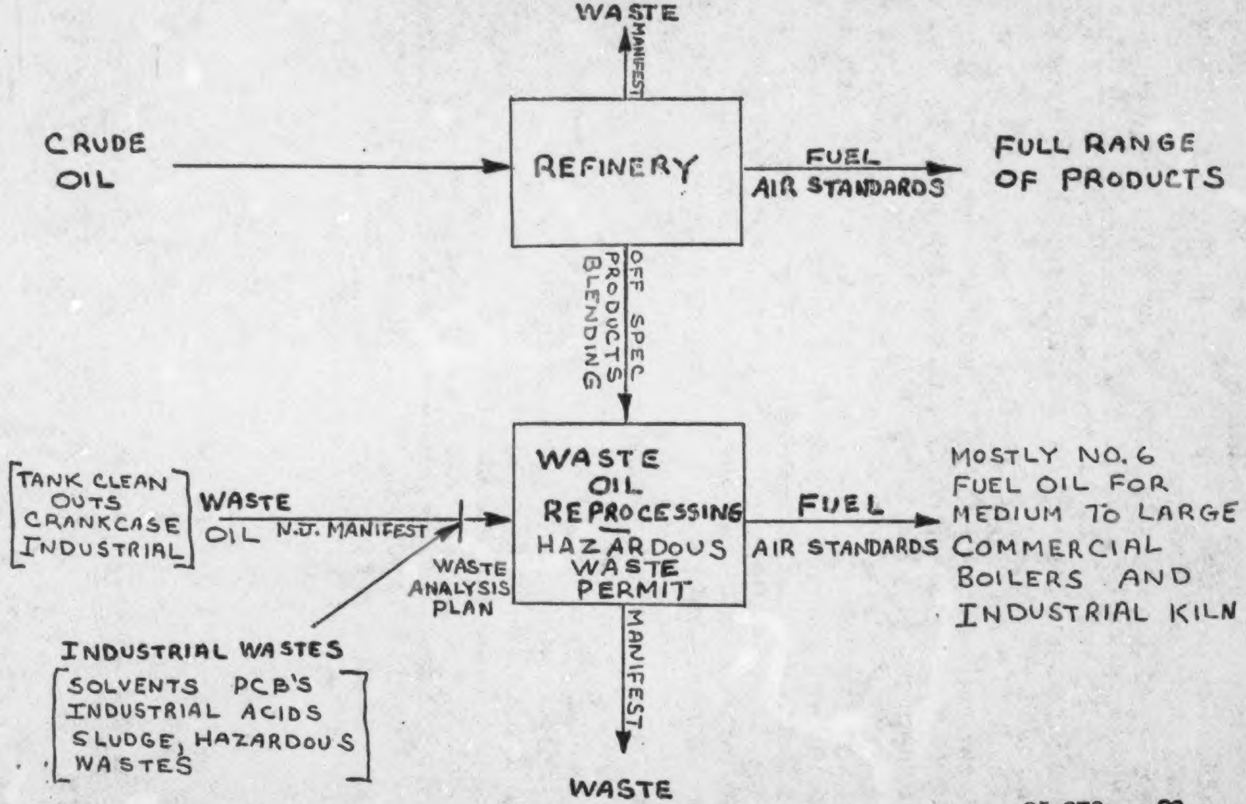
Finally, I would like to mention that New Jersey and New York are currently working on similar standards for waste oil as fuel. In fact they are contemplating almost identical limits. While such overlap is probably inevitable and even useful in the early stages of any regulatory program, in the long run it could result in a costly duplication of effort nationwide and possibly create a patchwork of nonuniform standards which could promote the transfer of contaminated waste oils from State to State. New Jersey believes the Federal Government should step in with its scientific and technical resources to assist the States in setting uniform quality standards for waste oil used as a fuel. I believe the licensing of facilities and the lead in enforcement efforts is best left to the States and to the cities, but that the Federal Government should have a major role in developing fuel oil quality standards.

I would like to thank you for inviting New Jersey to participate in today's hearing and I offer our support to you in achieving a solution to this environmental problem. I would like to extend to the committee and staff an invitation to visit us in New Jersey. We would be glad to show you our laboratories and manifesting and data processing system, share our informational resources with you. I would be happy to answer any questions you might have. Thank you for your patience.

[Attachment to Mr. Tyler's testimony follows:]

FUEL OIL DERIVED FROM CRUDE AND WASTE OIL.

NEW JERSEY REGULATORY PROGRAM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N.J. MANIFEST
WASTE ANALYSIS PLAN
WASTE OIL REPROCESSING
HAZARDOUS WASTE PERMIT
FUEL
AIR STANDARDS
MOSTLY NO. 6 FUEL OIL FOR MEDIUM TO LARGE COMMERCIAL BOILERS AND INDUSTRIAL KILN
INDUSTRIAL WASTES
SOLVENTS PCB'S
INDUSTRIAL ACIDS
SLUDGE, HAZARDOUS WASTES
MANIFEST
WASTE

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Mr. **Bedell.** Mr. Molinari.

Mr. **Molinari.** Well, I must say that was very, very interesting testimony. I think we are starting to get to the heart of the problem. First of all, I want to thank New Jersey for coming up with such strict regulations and then forcing these guys to come to New York and dumping their loads here. I am being facetious, of course.

Mr. **Tyler.** I want to say New York and New Jersey worked very closely, especially in the air pollution control area.

Mr. **Molinari.** How did you get New York to agree to accept the toxic waste that is coming in?

Mr. **Tyler.** I do not think it was by design. I think it is the result of surreptitious and nefarious individuals in the business which our strike force has made very successful initial attempts to deal with.

Mr. **Molinari.** I am very interested in your comment that you made at the conclusion of your testimony, that you thought the licensing procedure should be best left to the States, but regulations adopted on a national level.

Why do you come to that conclusion? As you pointed out before, I think it is something we have learned, to our distress, that those States that take the lead and do the right job have a tendency to get the abusers to leave their State and to go to other States where the regulatory bodies are not doing the job, so that it seems rather inconsistent. If you are going to set up different licensing standards, somebody who is attemping to get a license would go to a State where it is easier to get a license, and not be subjected to the same difficult criteria you might be establishing.

Mr. **Tyler.** I think first of all, the Federal Government, under the Resource Conservation Recovery Act, has already established a threshold of licensing standards for such treatment facilities, if waste oil is, in fact, considered a hazardous waste. That issue is before the EPA right now as I understand it. What I meant was that the implementation of those licensing programs is best carried out at the State or local level simply because that facilitates communication between the legitimate industry, the general public, and the enforcing agency. My comment on national standards was directed to my experience in the air pollution field where the scientific and technical talent that the Federal Government can amass is much greater in a given area and as a result they can be of great assistance to us and again set a national standard for fuel of quality.

Mr. **Molinari.** How about enforcement?

Mr. **Tyler.** I think there is a marriage of enforcement efforts that I have seen enhanced by the New Jersey strike force for example, where we met regularly with the U.S. attorney, our attorney general, and the State EPA. That has worked successfully in the hazardous waste treatment area as well as some of the more classic air and water pollution control area. But I think primary enforcement responsibility should be at the State level as long as the State doesn't do the job, there is a Federal resource available to step in and back it up, if you will.

Mr. **Molinari.** Is it your agency that would license a hauler or processor?

Mr. **Tyler.** Yes; at the present time the New Jersey Department of Environmental Protection is responsible for technical permits for hazardous waste treatment facilities and we register and license collectors and haulers of both solid and hazardous wastes.

Mr. **Molinari**. Re-refiners?

Mr. **Tyler**. Yes. We would have permitting responsibilities in various areas with re-refiners. I am not aware of any full-scale re-refining operations in the State at this time.

Mr. **Molinari**. If somebody were to come to you and seek a license, how long would it take for the various licenses to be processed by your agency?

Mr. **Tyler**. That is a very difficult question for me to answer at this precise time since the State has just adopted a new hazardous waste facility siting law which has yet to be utilized. In fact, the commission has a siting commission created by that law, and has not yet been fully established. Under that law, our staff has estimated that a licensing program for a full-scale major facility, one that could for example store more than 250,000 gallons of waste material, approximately a 2-year process; maybe a little longer, but that would involve an extensive amount of public hearings and public input, because of the great public concern with even the location of a sophisticated hazardous waste treatment facility in any particulăr area of our State, and I know this is true in every State right now.

In the case of a nonmajor facility the permit process probably takes from 4 to 6 months depending on the scope and nature of the operation.

Mr. **Molinari**. How about New York State, Mr. Allen?

Mr. **Allen**. In terms of permit review, our division of solid waste has promulgated some new rules which I am not really familiar with, but they do have a siting board requirement. That siting board requirement I believe would be quite lengthy. Under the Uniform Procedures Act, we are obligated, this is if the facility didn't fall under the siting board, to review a complete application within 90 days unless there is a hearing. Then there is a gap in time which allows for the hearing and the record and decision.

So, I would think for a reprocessing facility or re-refining, if it was not subject to the siting board, probably 6 months. If it was, I have no way of hedging a guess right now because we have never been through one but it would certainly I think be more than 6 months.

Mr. **Molinari**. I have heard a number of complaints throughout the State that, indeed, one of the big problems in New York State is the difficulty in getting a license and the length of time it takes to get a license. You have people willing to invest money in a process we all want to see encouraged, for obvious reasons that have been mentioned here this morning. Yet, it would appear that at least in the case of New York State—I am not that familiar with New Jersey—that it takes years, literally years to get such a license; I see people in the audience nodding their heads affirmatively.

If indeed you want to attract legitimate persons into this kind of business and keep out the abusers, why is it that we have been dragging our heels so much in this State?

Mr. **Allen**. I don't really think we have been dragging our heels, at least from the technical point of view. We acknowledge the fact that there are places, and there is a need to legally handle these materials. We have requirements on the books which provide for public review and comment; namely, the State Environmental Quality Review Act. These processes, public information and education take time. I do not think we are intentionally dragging our heels. I think we are bound by the rules under which the State operates.

Mr. **Molinari**. I am a little confused. I do know of people, indeed, I think we are going to hear from people today, legitimate people, who want to invest their own resources and run a legitimate operation, and this applies to Jersey as well as New York.

There is one line of questions I would like to ask, and I don't want you to answer this question if it is going to get into an area that you shouldn't, about Quanta Resources which is an outfit that should be known well to both of your departments. How did the State of New York give a temporary license to Quanta Resources? The background they had was certainly questionable at best. Then you turn around and find the legitimate guy is trying to get a license for years and can't get it, though he is willing to invest millions of dollars. Quanta was under investigation and I think indicted, yet was able get a temporary license to get involved in waste oil removal and disposal. Now we are learning that it indeed probably abused the hell out of the disposal of the waste oil from the Chelsea Terminal. Once again, I can't equate both of those things.

Mr. **Tyler**. I will try to respond to that. I think you are on the cutting edge of an evolutionary problem in environmental management. Typically, standards were set in the early 1970's that did not permit, under law, a State or Federal agency to deny a license to someone because he had a background in the criminal area. It took some time to put those laws and rules in place in our State. In response to the problem that particular company caused, I think you will find that after they were temporarily licensed—and this can happen in any licensing situation—they violated the terms of that license.

We were informed of that, and literally within days of the time when that information was available to our enforcement staff, the company was in fact no longer operating.

Mr. **Molinari**. Can I interrupt you?

Mr. **Tyler**. Yes.

Mr. **Molinari**. That seems to be the MO of the abusers. They go in, get a license; operate illegally. As soon as somebody makes a phone call from the agency—somebody breathing down their throat, a padlock appears on the main gate; everybody disappears. You call Quanta Resources now, and somebody answers. You will say, "Is this Quanta Resources?" They will say, "They are no longer here," and they will hang up. Are there bonds required?

Mr. **Tyler**. Absolutely.

Mr. **Molinari**. They submitted the bonds, and it was investigated?

Mr. **Tyler**. I am not going to discuss the details of that particular case, one, because I am not totally familiar with it, and, two, I think it is still part of a pending investigation in the State. But yes, you are right. We require financial guarantees in advance generally for applicants for hazardous waste treatment facilities. We have tried to marry criminal investigatory efforts with civil efforts. But when you have a person who is just going to close the door and operate someplace else with a new corporate name—create a fraud in other words—that we can deal with him through the criminal system. I think if you talk to our division of criminal justice you will find a track record of many, many indictments and convictions since the strike force was formed in early August 1979. It devoted a lot of effort to the hazardous waste mismanagement area, if you will. Another area you raised, very important, that is what is happening with new legitimate industry that wants to come in and site a good facility.

I agree with Mr. Allen. The technical problems are not insolvable. They certainly cannot be resolved quickly. The problem is that the public, correctly viewing the mistakes of the past, and I don't mean just government, I mean the industry and everyone in general, mistakes of the past that have been corrected, is skeptical, very skeptical of any solution put forth. In an attempt to site a hazardous waste treatment facility, if this were a hearing on siting a hazardous waste facility I suggest we would need substantially more space to seat the opponents. It is no fun to be a bureaucrat any more.

Mr. MOLINARI. Do you have any evidence of toxic oil being dumped in landfills in New Jersey?

Mr. TYLER. From time to time that has been done in the past. We have a fairly good enforcement program. Liquids in landfills are not permitted anywhere in the State with two exceptions where we have leaching collection systems. Putting any kind of liquid in a landfill or anywhere is silly because it comes out as a toxic even if it goes in as plain water.

Our legislature and executive branch have acted over the past years to eliminate that completely with two exceptions which are really for wastewater treatment plant sludge primarily that are in fact considered dry but are in fact 75 or 80 percent liquid.

Mr. MOLINARI. You mentioned before a $100 million bond issue. What was that for, specifically?

Mr. TYLER. That is for hazardous waste site decontamination efforts. For past practices, perhaps even legal past practices 50 to 100 years ago, the past 2 decades maybe, where waste was disposed of improperly and needs to be removed. We have for example things ranging from sites where the Manhattan project ran laboratories in the Second World War which we have to decontaminate low levels of radiation from all the way through the chemical control site which had thousands of barrels of toxic waste piled up.

Mr. MOLINARI. We have heard a great deal from both States as far as enforcement and what to do about those who would violate the rules and regulations and laws in effect today. I would like to ask each of the States represented here on the panel to try to give us an idea as to the number of violations where legal action has been instituted by your department.

Mr. ALLEN. Unfortunately, I am not in the enforcement line, so I don't have full knowledge of that.

Mr. MOLINARI. Would you check, then, back with your department and furnish this subcommittee with the number of those who were cited within the last 5 years, year by year?

Mr. **Allen**. If that information is available, yes, sir, I will. The number cited for a violation of what, specifically?

Mr. **Molinari**. Violation of the rules and regulations adopted by your department in the area that we are discussing—those who have been violating the waste disposal regulations of your department.

Mr. **Allen**. I will.

Mr. **Tyler**. My lawyer is telling me not to generalize in this area. I will be glad to provide the committee with very specific data. I will generalize just a bit and say that enforcement staff has advised me that administratively, we deal with approximately 1,000 procedural and substantive violations a year. We probably have 30 to 50 cases in court in the civil side alone. We assess anywhere from $100,000, $150,000 a month in civil penalties. I would have to get you more precise data on the air and water pollution programs, probably on the same levels. But we will get that to you.

[The information follows:]

Hazardous Waste Violations and Penalties

Calendar Year 1981

Nature of Hazardous Waste Violation	Administrative Consent Orders	Administrative Orders	Notice of Prosecution	Penalties
General provisions of enabling statute N.J. Solid Waste Management Act, N.J.S.A.13:1E-1 et seq.	4			
HAZARDOUS WASTE RULES:				
Subchapter 2 Disposal		4	31	$440,000
Subchapter 3 Collection and Haulage		3	16	$ 26,000
Subchapter 7 Labeling, Records and Requirements		6	37	$ 26,750
TOTALS	4	13	84	$492,750

Hazard Management Violations and Penalties

July 1981 - December 1981

Nature of Violation	Directive Letters Issued	Notices of Prosecution	Penalties Collected	Cases Referred to Attorney General
Violations of the New Jersey "Spill Compensation and Control Act", N.J.S.A. 58:10-23.11 *et seq.*	21	32	$25,502	11

Water Pollution Violations and Penalties

Calendar Year 1981

Nature of Violation	Administrative Consent Orders	Administrative Orders	Notices of Violations	Penalties Assessed
Various violations of several water statutes*	42	88	75	$340,673.60

*May incorporate a violation related to hazardous waste.

Air Pollution Control Violations and Penalties

Calendar Year 1981

Nature of Violation	Administrative Consent Orders	Administrative Orders	Notices of Prosecution	Penalty Assessed
New Jersey "Air Pollution Control Act", N.J.S.A. 26:2C-1 _et seq_*	44	1273	401	$611,300

*May incorporate a violation related to hazardous waste.

Mr. **Molinari.** Very good. I will defer to the chairman. I have one or two more questions, Mr. Chairman, but I will defer at this point.

Mr. **Bedell.** I have two or three short questions.

Mr. Allen, you are apparently in charge of air pollution, environmental conservation?

Mr. **Allen.** That is correct.

Mr. **Bedell.** As a layman, can you tell me how seriously concerned I should be if there are people burning oil that has PCB's and this sort of thing, in terms of the health hazard it would cause for the citizenry that might be exposed to the fumes that settle?

Mr. **Allen.** The Federal Government has set a limit of 50 parts per million. If waste contains less than 50 parts per million, they don't consider that a problem.

Mr. **Bedell.** I am aware of that. That is not my question.

Mr. **Allen.** Your concern is really what impact it is going to have on the population.

Mr. **Bedell.** Yes. Might it be a cause for people to have cancer they wouldn't otherwise have, for example. As a layman, what concerns should they have?

Mr. **Allen.** My view of the problem is that it is not a widespread problem, it is a localized problem where these loads of contaminated oil are being delivered and burned. I am not really sure that the same burner receives loads of the same kind of contamination every time.

I think the problem is a chronic problem, because we are talking in general about low levels of this contamination. When they are burned, and then they are dispersed through the air depending upon the stack height and location, meteorology, the impacts are not going to be constant on any one receptor. So I would think the concern is not great, unless you live locally close to the location. And then that will depend upon the size of the facility, the combustion efficiency of the facility, and facility nature of the contaminant. As I mentioned before, there is a vast range of contaminants. It is really hard to evaluate and make a general statement.

Mr. **Bedell.** If there were heavy metals for example, or PCB's, and this sort of thing, being burned, that could provide hazards?

Mr. **Allen.** It could provide some severe local effects.

Mr. **Bedell.** Is Mr. Marshall in the room? I wish you weren't so far in the back, Mr. Marshall. Can you hear everything?

Mr. **Marshall.** Yes, I can.

Mr. **Bedell.** If you are hearing what I am hearing, I am hearing there is great disappointment in the fact that EPA is not somewhat more concerned with these efforts of moving forward more rapidly and showing more cooperation with us. Apparently what we have is more concern out at the local and State levels than we do at the national level.

If you are hearing it differently than that, I hope when you come to testify, you will say that you have heard something quite different than I am hearing as chairman of this subcommittee.

How successful is Superfund working, Mr. Tyler?

Mr. **Tyler.** I have had the opportunity in the past few weeks with meeting with some of the Superfund staff. They are anxious, I think, to make it work effectively. We have had a perceptive problem, at least in New Jersey, in the sense that we have been out front in the hazardous waste cleanup area.

We are eagerly awaiting a check. For four of the major sites, the check is in the mail. We have been working very well, I will have to say, however, Mr. Chairman, with EPA region II, on developing background studies and technical data to properly clean up these four sites.

While we would like to see the money float faster, I think we have taken a few successful steps up to now.

Mr. BEDELL. Have you received any money yet?

Mr. TYLER. We have a commitment of funds for engineering studies and feasibility studies on one major site. We have received emergency funding under Superfund. First, under 311(k) of the Federal Water Pollution Control Act, we have received emergency moneys. We have seen Superfunds expended at the Kinbrook site.

Mr. BEDELL. Have you applied for it?

Mr. TYLER. Yes.

Mr. BEDELL. Do you know why you haven't received it?

Mr. TYLER. In some cases, yes; in some cases, no. In most cases, we are just awaiting decisions.

Mr. BEDELL. My understanding is that the money is there.

Mr. TYLER. There is a $1.6 billion Superfund. In the last 2 years, there have been appropriations of several hundred million dollars of that money. It is there and available, and we would like to see it move more quickly into the system.

Mr. BEDELL. We are very short of time. I should tell you, I did not think you gave Mr. Molinari a very good answer to the reasons for the delays in licensing legitimate people. And you said well, it is because we have to hear from the public and so on.

Mr. TYLER. That is precisely correct.

Mr. BEDELL. This is a new thing to me. I am from outside. I can understand hearing from the public, but usually it shouldn't take years to hear from the public. That sounds to me like an excuse that I would not accept.

Mr. TYLER. I will be glad, Mr. Chairman, to submit a copy of our new siting legislation. I am sure New York would also.

Mr. BEDELL. I am talking to both of you.

Mr. TYLER. Right. Which institutionalizes in fact an extremely elaborate public review process, precisely because of the public concern with the potential for harm when facilities are not properly operated and managed. And in order to make sure that we had environmentally sound facilities in place and could deal with that sort of public position, and have an adequate amount of public input, our bill, for example, provides that a municipality receive money, operating funds, over the long haul from any hazardous waste treatment facility cited in that facility so it can conduct inspections on its own, conduct studies on its own to insure the operation is sound prior to the licensing.

Prior to the licensing, they get money for their own independent consulting work——

Mr. BEDELL. What you are telling us is that it is not because of the rules and regulations you folks are putting in but somebody else above you has put rules and regulations which require you to do all these things that cause the great delays.

It is not really your fault, it is somebody up above that has passed laws or something. We are short on time.

Mr. **Tyler**. I didn't mean to imply that. I encourage that kind of public participation myself. In fact, we have also made more technical changes in our rules, more elaborate, because we have learned more about these facilities. So I think it is a two-step process that is making the siting and licensing process take so long. One is greater technical review and two is more opportunity for public input.

Mr. **Bedell**. So you think it is both.

Mr. **Tyler**. Yes.

Mr. **Bedell**. Partly you folks and partly the people above you that put in more and more rules and regulations that make it more difficult for somebody to do something they think ought to be done.

Mr. **Tyler**. That is right.

Mr. **Molinari**. I have two quick questions to the States involved. Do you have adequate personnel to be able to do the job entrusted to you, particularly in view of the fact that you are both adopting new sets of rules and regulations? Do you have the enforcement personnel to be able to fulfill the mandates that you are given?

Maybe that might be part of the reason for these delays. If there were additional personnel, could the process be moved along faster? This is a two-part question.

Mr. **Tyler**. I will just answer for New Jersey, obviously. Not at the very moment we are speaking. However, beginning in this current fiscal year, as I said in my testimony, New Jersey committed its own State dollars to a $2.5 million hazardous waste regulatory program which, in our opinion, will provide sufficient personnel to adequately police the problem and adequately move licenses quickly, whether or not we get any Federal support.

Mr. **Allen**. I can only speak for the air pollution point of view. From our point of view, we have enough resources right now to implement the rule, or to get the rule on the books. Once we do that, then the enforcement will require significantly more resources in the area of laboratory analysis and some field staff. That should not be an insurmountable problem, but there will be an increase in resources needed.

Mr. **Molinari**. The last question that I have, is directed to Mr. Allen. I have a list, Mr. Chairman, I would like to introduce into the record. This is a list that was furnished by the State department of environmental conservation to minority counsel of all waste oil transporters in New York State.

Mr. **Bedell**. Without objection, it will be entered in the record.[3]

Mr. **Molinari**. Thank you. You mentioned there may be some burning of waste oil by some of the large producers in the State.

Mr. **Allen**. Burning of waste oil by larger facilities such as cement mills, large utility boilers and other installations.

Mr. **Molinari**. Long Island Lighting Co. has 1,400 vehicles. Niagara Mohawk has 1,200. Do you know whether they are involved in such a process?

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[3] Material retained in subcommittee files.

Mr. **ALLEN**. I have no knowledge of that list. I have no intimate knowledge of either Long Island Lighting or Niagara Mohawk burning waste.

Mr. **MOLINARI**. Is there any policy in your department to contact some of these large producers?

Mr. **ALLEN**. Yes, our field staff right now is doing just that kind of thing, to generate a complete list of where these materials were burned.

Mr. **MOLINARI**. Thank you very much. I would just like to make one last statement to you folks from Jersey. I don't want to sound partisan, Mr. Chairman, but I did read Governor Kean's inaugural address. I know he made a specific reference to one of his major concerns, the environmental problems affecting his State. I have sent him a letter in the last few days, saying the ones that affect your State are the ones that affect my congressional district to a large extent.

So I am pleased to see the direction in which he is moving. In fact, I have asked for a meeting in the near future to discuss that question.

Mr. **TYLER**. Thank you very much, Congressman. New Jersey has a long and proud history of bipartisan and great support for environmental protection. Thank you.

Mr. **MOLINARI**. Thank you.

Mr. **BEDELL**. Thank you both for your testimony.

We are trying to do the best we can to get everybody on.

Our next panel will consist of Mr. Irving Berkowitz, Association of Processors of Liquid Resources, Inc.; George Booth III, of Booth Oil, Buffalo, N.Y.; and Donald Donahue, American Oil & Supply Co. of New Jersey. It is our understanding Mr. Donahue has been so kind as to stay, and postpone an appointment he had. Unless there is objection, we will let him go first here. Then, if you wish, you may be excused, Mr. Donahue, if that is all right with Mr. Molinari.

Mr. **MOLINARI**. That is fine.

Mr. **BEDELL**. If we have any questions, we will cover those first.

PANEL CONSISTING OF DONALD R. DONAHUE, ACCOMPANIED BY MICHAEL D. SHERMAN, ESQ.; JAMES WELLS; IRVING BERKOWITZ, ACCOMPANIED BY MELVIN MAIMAN; AND GEORGE T. BOOTH III

Mr. **DONAHUE**. I appreciate that.

Mr **BEDELL**. I want to thank you again, Mr. Wells. If you can stay, fine.

Mr. **WELLS**. I am not sure if I can stay or not. I am going to make another phone call.

Mr. **BEDELL**. We would certainly understand it if you cannot. We appreciate the way you have stayed around.

You may proceed, Mr. Donahue.

TESTIMONY OF DONALD R. DONAHUE, AMERICAN OIL & SUPPLY CO., NEWARK, N.J., ACCOMPANIED BY MICHAEL D. SHERMAN

Mr. **DONAHUE**. Thank you.

My name is Donald R. Donahue. I am general manager of American Oil & Supply Co. of Newark, N.J. I appear before the subcommittee as a member of the board of directors of the Independent Lubricant Manufacturers Association, ILMA; accompanying me is Michael D. Sherman of the Washington, D.C. law firm of Collier, Shannon, Rill & Scott, counsel to ILMA. ILMA thanks the subcommittee for this opportunity to present its views on used lubricating oils.

ILMA is a nonprofit trade association composed of approximately 150 small independent companies which compound, package, and market lubricating oils and greases. Independent manufacturers generally are family-owned and family-operated businesses which range in size from 10 to 300 employees. By independent, I mean that these firms are neither owned nor controlled by firms that produce virgin base lube stocks from the refining of crude oil. These firms provide several hundred lubricant products to a wide variety of consumers including the automotive, industrial, aviation, construction, agricultural, marine, public utilities, mining and drilling, and recreational industries in this country.

Independent lubricant manufacturers compete with one another, as well as with refiners and re-refiners, in the sale of finished lubricant products. Sales by ILMA members constitute approximately 20 percent of the lubricants market. ILMA members for years have prided themselves on their efficiencies in manufacturing high-quality lubricants and greases. Most independent lubricant manufacturers purchase virgin lubricant base stocks from refiners.

Lubricants are then produced by blending differing percentages and types of lubricant base stocks with various chemical additives. These additives are necessary to improve or change such physical characteristics of the liquid lubricants such as pour point and viscosity. The proper selection of base stocks and chemical additives depends upon the requirements of the machinery for which the lubricant has been produced. Greases are produced by a similar process in which the mixing of animal or vegetable fats and alkalies with lubricant base stocks takes place.

Finished lubricants serve many purposes, including maintaining engine cleanliness, improving load-carrying capacity, reducing friction, preventing wear, and reducing maintenance. ILMA fully supports the goals of conserving a vital energy resource, lubricating oil base stocks, and reducing deterioration of the environment by increasing recovery and reuse of used lubricating oils.

ILMA believes primary emphasis in recycling used lubricating oils should be placed on re-refining that produces a truly quality lube stock. This emphasis, however, should not be to the total exclusion of processing for other purposes, such as blending with heavy fuel oil for burning in boilers. An environmentally sound and healthy re-refining industry can recover significant amounts of used lubricating oils generated annually.

Equally significant from the perspective of an ILMA member, re-refining of used lubricating oils to produce a neutral base stock can mitigate critical lubricant shortages anticipated to occur by the mid 1980's. A number of historical and institutional barriers have prevented greater recycling of used lubricating oils by re-refining.

The economics of used oil recycling, the complexity of lubricants manufactured, and the logistics of used oil collection have resulted in less used lubricating oils being recovered in this country than in other Western, industrialized nations. Currently, the availability of re-refined base stocks does not come close to permitting the demand for finished lubricants to be met in this country. While many barriers to greater recycling of used oils have been identified and addressed, the practice of uncontrolled burning of used lubricating oils is the single biggest impediment to the recovery and re-refining of used lubricating oils.

Government efforts should be directed at removing these barriers and permitting re-refined products to compete on an equal footing with virgin products in the marketplace. The potential savings by the recycling of used lubricating oils are significant. Most petroleum products cannot be recycled because they are consumed in use. Lubricating oils can be recycled; they are not consumed and they do not wear out.

Lubricating oils simply get dirty, but they can be restored to their original quality. Re-refining 1 barrel of used lubricating oil is not the saving of merely 1 barrel of crude oil, but the potential saving of as many as 20 barrels, because used lubricating oils can be re-refined a number of times. The potential saving also is significant because it takes less energy to re-refine a barrel of used lubricating oil into a lubricant base stock than to produce virgin base stock from a new barrel of crude oil. Thus, recycling of used lubricating oils, particularly by re-refining, is in accord with national energy policy to reduce our country's dependence on imported petroleum through conservation measures.

Increased recovery and reuse of used lubricating oils would preserve the environment because most recoverable used lubricating oils are released into the environment through dumping or uncontrolled burning.

It is estimated that approximately 1.4 billion gallons of used lubricating oils are generated annually. Slightly more than half of this total is used automotive crankcase oils, while used industrial oils make up the remainder of the total. Approximately 700 million gallons are burned as fuel, 400 million gallons are disposed of either indiscriminately or with garbage or trash, 200 million gallons are used for road oiling or similar purposes, and only 100 million gallons are re-refined or reclaimed. Even a modest increase in the amount of used lubricating oils that are recovered and re-refined would produce a tremendous benefit to preserving the environment from further degradation.

Thus, increased emphasis on re-refining of used lubricating oils enhances well-established energy conservation and environmental policies.

To ILMA members, greater re-refining of used lubricating oils to produce base stocks equivalent to virgin base stocks has a significant impact beyond the public policy goals discussed above. Despite the apparent glut today of petroleum products, independent lubricant manufacturers are concerned with the availabilty of a dependable source of base stock supplies.

Many forecasts of lubricant supply and demand predict that the United States designed manufacturing capacity for base stocks will be unable to satisfy demand by the mid-1980's.

This problem is compounded by the uncertainties of crude oil supplies from foreign countries, particularly during a national emergency. In addition, refiners have been reluctant to upgrade existing refineries or build new lube capacity because of these supply uncertainties and an inadequate return on investment.

In the absense of these base stock supplies, there is no available, inplace technology to meet the Nation's lubricating needs. Re-refining used lubricating oils, therefore, can mitigate future critical shortages of lubricants and can minimize possible interruptions to essential economic activities which cannot function properly without adequate lubricants.

Besides threatening the competitive viability of independent lubricant manufacturers, most small- and medium-sized businesses which are dependent upon independent lubricant manufacturers also would be jeopardized by such shortages. The increased availability of base stocks produced the re-refining process, therefore, is a practical means for an independent lubricant manufacturer to protect his investment and place in the market. Thus, ILMA favors greater emphasis on the recovery and re-refining of used lubricating oils.

A number of institutional barriers have combined over the years to discourage re-refining of used lubricating oils. Federal tax and regulatory policies, adopted when petroleum was plentiful and cheap and the concern for the environment was limited, almost eliminated the re-refining industry at a time when the volume of used lubricating oils generated was increasing.

However, as national interest in recycling used materials as a means of conserving valuable natural resources and protecting the environment has grown, these barriers to increased re-refining have been identified and addressed.

Congressional actions, such as the enactment of the Energy Policy and Conservation Act, Public Law 94-163; the Resource Conservation and Recovery Act, Public Law 94-580; the Energy Tax Act, Public Law 95-618, and the Used Oil Recycling Act, have signaled strongly that re-refining of used lubricating oils is to be encouraged.

However, implementation of these legislative directives has been slow. For example, section 383 of EPCA requires the development of test procedures by the National Bureau of Standards which can be used to establish the substantial equivalency of re-refining lubricants to virgin products. The section also prevents any recycled oil to be labeled with any term, phrase, or description which connotes less than substantial equivalency with new oil for a particular purpose.

Thus, the origin of an oil would not be required to be noted once NBS equivalency standards have been developed by NBS. It is uncertain whether the work will be completed given current Federal budget considerations. Due to the delays in the development of equivalency standards, Congress, in the Used Oil Recycling Act, suspended the Federal Trade Commission's rule which required recycled oil to indicate that it is derived from previously used oil.

ILMA members remain extremely concerned with this delay and, also, with the lack of equivalency standards for base stocks reclaimed by re-refining. A re-refined lubricant can only be equal to a virgin product if all the re-refined components are equal in quality to the components of a virgin product. Therefore, procedures should be developed as soon as possible which assure that re-refined base stocks are of sufficient quality, consistency, and additive response to produce a truly equivalent finished product.

Indiscriminate burning is the greatest impediment to the re-refining of used lubricating oils. It also is a significant environmental problem. However, there are proper uses of processed used lubricating oils as a boiler fuel. Requiring the removal of heavy metals and other contaminants from used oil in order to qualify as fuel or restricting the burning of used oil to facilities with highly efficient emission control equipment would permit used lubricating oils that could not be re-refined to be reused in an environmentally acceptable manner.

Controls on indiscriminate burning are necessary because the economics of re-refining are affected strongly by the value of used lubricating oils for burning. The indiscriminate burning of unprocessed used lubricating oils forces up the prices of unprocessed used oil to that of virgin fuels. This market is difficult for a re-refiner to compete for reasonably priced feedstocks. Restricting the burning of unprocessed used lubricating oils thus would make it more economically attractive for more used lubricating oils to flow to re-refiners to be reclaimed.

Another barrier to greater re-refining is the misuse of used oil collection sites for the disposal of hazardous wastes. A variety of toxic solvents, polychlorinated biphenyls, PCB's, and other toxic materials frequently are improperly disposed of at these sites. Thus, ILMA suggests that adequate safeguards at collection centers are necessary to prevent the improper disposal of such hazardous materials. Prohibiting materials improperly dumped in used oil would provide re-refiners with a more uniform used oil feedstock. As noted above, re-refined base stocks must be relatively free of impurities and equivalent in quality to virgin base stocks if their use is to be increased.

The economic development of the re-refining industry is hindered by financing barriers. The antiquated acid and clay process has been the mainstay of the re-refining industry for years, has come under increasing environmental regulation of the disposal of the acid and clay sludge created.

New technologies, such as propane extraction and distillation hydrotreating, are available, but the capital costs of these technologies are expensive. It is extremely difficult for a small business, such as that of an independent lubricant manufacturer or a re-refiner, to obtain the financing to construct the new generation of re-refineries.

The availability of low-interest, long-term financing, such as through industrial development bond issues with appropriate Small Business Administration guarantees, coupled with restrictions on indiscriminate burning of used lubricating oils, would create the environment necessary to stimulate investments in new re-refineries.

ILMA believes such programs as SBA's pollution control loan guarantee program should be continued. ILMA supports efforts to remove the barriers which historically have hindered the re-refining industry, as long as it can be assured that these base stocks reclaimed by re-refining are adequate in quality and the resulting lubricants from the re-refined base stocks are fit for their intented use.

The re-refined products should be permitted to compete equally with virgin products. Implementation of legislative directives in this area, however, have been slow. For example, section 383 of the Energy Policy and Conservation Act requires development of test procedures by the National Bureau of Standards to establish the substantial equivalency of re-refined lubricants to virgin products.

No such equivalency standards have been developed by MBS. It is uncertain whether the work will be completed given current Federal budget considerations. Due to MBS delays, Congress in the Used Oil Recycling Act suspended the FTC rule which required recycled oil to indicate it was derived from previously used oil.

At the heart of the matter for a lubricant manufactured from rerefined base stocks to be treated equally with a virgin product, it must be equal. Test procedures capable of assuring the quality, consistency, and added response of re-refined base stocks are crucial. This factor is very significant in the acceptability of re-refined base stocks. They generate jobs and actually provide revenue to the Federal Government in addition to conferring a public benefit.

Another barrier to increased recovery of used lubricating oils is the substantial volume of used automotive crankcase oils generated and improperly disposed of by the do-it-yourselfer. There has been a dramatic shift in recent years in the sales distribution of these oils from service stations to discount stores catering to do-it-yourselfers. The majority of automotive crankcase oil sales today are to do-it-yourselfers, who routinely dispose of their used oil by throwing it away. Evidence supports the contention that do-it-yourselfers are reluctant to return used lubricating oil to a collection point.

Several States have developed recycling programs to collect used oil. Such programs have had varying levels of success. State energy and environmental officials have formed the National Association of Oil Recovery Coordinators to expand used oil recycling programs through standardization of signs and materials, mass promotions, and the like. However, inadequate funding has caused the group's efforts to be severely restricted. Greater support for State and local used oil collection programs is necessary.

In urging the greater re-refining of used lubricating oil, ILMA supports efforts to remove the barriers which historically have hindered the re-refining industry. However, ILMA believes these efforts cannot require a preference for re-refined products over virgin lubricants. As long as the re-refined lubricant is fit for its intended enduse, it should be permitted to compete equally with a virgin product. Other market factors, price, and service by the lubricant manufacturer will dictate whether the customer will purchase equivalent re-refined lubricants. ILMA members have prided themselves on their efficiencies in manufacturing lubricants and want only the opportunity to purchase re-refined lubricant base stocks equivalent to virgin ones and to compete fairly in the market.

In summary, ILMA believes that Federal, State, and local governments in recent years have taken large strides in removing the barriers to the re-refining of used lubricating oils. ILMA members encourage greater re-refining so that they can have additional source of supply for lubricant base stocks. However, the amount of used oil that is re-refined will not increase without greater restrictions on the indiscriminate burning of unprocessed used oil.

Re-refined lubricants must not be given a competitive advantage in the market, but should be allowed to compete equally with virgin products. ILMA appreciates this opportunity to express its views with respect to the recovery of used lubricating oils. I will be happy to respond to any questions.

Mr. **MOLINARI.** What are the differences between re-refined oil and virgin oil? I understand at one time you had a label for re-refined oil, but that was removed a couple of years ago as I understand it.

Mr. **DONAHUE.** From an industry point of view we don't believe re-refined base stocks should be differentiated. But we are concerned about the quality of that re-refined base stock. A virgin base stock will respond to the chemicals added to the final product. One of the problems we see in the collection, and the fact that all kinds of other things are disposed of in that collection center, the output product of a re-refinery has to be a consistent, good product. If the input has foreign chemicals that are of a hazardous nature, the output product will not be consistent. I think both sides of the issue have to be addressed.

Mr. **MOLINARI.** The National Bureau of Standards is the one that you are looking to?

Mr. **DONAHUE.** They were given the assignment. It is not very far down the road.

Mr. **MOLINARI.** Have you been there recently? You have? What is the latest reading?

Mr. **SHERMAN.** It is still up in the air.

Mr. **BEDELL.** Thank you very much. We should mention in the President's new budget proposal he has proposed some money for the SBA pollution control program but specified that that cannot be used as guarantees for tax-exempt bonds, municipal industrial revenue bonds. At least our understanding is that for practical purposes that kills the effectiveness of the——

Mr. **DONAHUE.** When we are talking about 1½ billion gallons of a very valuable resource that is reclaimable, in the neighborhood of 60 to 80 percent, depending upon the process used, I would think the Federal Government would want to take a second look at that.

Mr. **BEDELL.** The small business pollution control program, you mean?

Mr. **DONAHUE.** Yes.

Mr. **BEDELL.** Yes.

I think we should be aware of the fact that the provision which says that these cannot be used for guarantees on industrial revenue bonds——

Mr. **DONAHUE.** The heart of the matter and the practical business reason that re-refining is a necessary industry in this country is that this country, unlike Europe, has been self-sufficient in large measure in lubricating oils type of crude oil. Those supplies are less and less available. As a manufacturer of finished lubricants, we note great differences in the quality of refined base stocks available now. That is simply the forced change of the crude oil stream at the refinery level, because what was there is no longer there.

The necessary act of re-refining really becomes a necessary thing in this country, as it has been in Europe for years.

Mr. **BEDELL**. You are talking about the change from sweet crude to sour crude?

Mr. **DONAHUE**. Lights to heavies.

Mr. **BEDELL**. So there will be less available lubricants in the future?

Mr. **DONAHUE**. Sure.

Mr. **MOLINARI**. Could you briefly describe your association? You have 150 members?

Mr. **DONAHUE**. Yes.

Mr. **MOLINARI**. Where are they from geographically?

Mr. **DONAHUE**. All over the country; some from Canada, some from Mexico, very few members from foreign countries. Very evenly distributed nationally.

Mr. **MOLINARI**. They represent roughly what percent of the industry?

Mr. **DONAHUE**. Twenty percent of the finished lubricant market in this country.

Mr. **MOLINARI**. That is very important information. I certainly appreciate your testimony. I have no further questions at this time, but I would like to speak to you again in the future to pursue this matter.

Mr. **DONAHUE**. Love to do it.

Mr. **BEDELL**. We appreciate very much your postponing your other appointment in order to be here, Mr. Donahue. Thank you.

Next we will hear from Mr. Berkowitz of the Association for Processors of Liquid Resources, Inc.

TESTIMONY OF IRVING BERKOWITZ, ASSOCIATION FOR PROCESSORS OF LIQUID RESOURCES, INC., ACCOMPANIED BY MELVIN MAIMAN

Mr. **BERKOWITZ**. Thank you very much. I thank you for the opportunity to voice both my personal opinion and the opinion of the association of which I am a member, director and treasurer. The Association for Liquid Resources is an association made up of various categories, all having to do with hazardous waste and disposal of the same.

This was a last moment offer to speak, so I don't have a prepared statement, so excuse me if I am a little rough ad-libbing. The association members are made up, as I said, of various categories. These categories are environmentalists, consumers, transporters, engineers, professionals, and attorneys, including the facilities that reprocess the hazardous wastes.

It is a general category. I know the committee is addressing the waste oil problem, but included in the waste oil problem you have spoken of the various contaminants that are truly hazardous by nature. Hazardous waste is a very, very general term. I might say a virgin product that has fallen off a shelf and landed on a clean floor is considered hazardous. The same is true of oil. It is truly hazardous by nature? What are the contaminants really in waste oils with a controlled collection process?

The contaminants as listed in various manuals which I have in front of me, many more of which are available, I refer to the Bureau of Standards of the Department of Commerce. The primary contaminant as we know it in lubricating crankcase oils is lead. It states here lead and lead components found as impurities in recycled oil used as fuel result primarily from use of leaded gasolines. I might state that as we all know the use of leaded gasolines is diminishing rapidly, and the use of unleaded gasolines, and if you are using an unleaded gasoline it stands to reason you are going to have less contamination in these crankcase oils.

The remaining lubricating oils are cutting oils, and other types of lubricating oils, turbine and so on, whose contaminants don't really cause much of a problem. When we talk about fuels in general, we are making a comparison of waste oils possibly to be used as fuels. Fuel oil, as we know it, is a residual product. Some are distillates, some are residuals. But if we are talking about using waste oil in lieu of fuel oil, we are primarily referring to displacing residual oil. If we take a moment and really look at residual oil, I think we are going to find that these recycled oils are applicable and can readily be used as fuels.

The word "residual" itself is a leftover. No. 6 oil is a leftover product from a process, refining process. They are contracting for other products, and this, and I could refer to Mr. Schmidt, describing residual oil in the early forties having been a problem. Where are we going to dispose of this because we want to contract gasoline, we want distillates, but what are we going to do with the residual product?

The utilities are given the burden of disposing of this residual product. Today it is a very valuable commodity. A lot of emphasis has been placed on its use. The Carter administration gave all kinds of incentives to use products with Btu heat values to be used as alternate fuels. Certainly waste oils can be included as one of these.

Processed oil, as we know it, contains little or no contaminants that are to be considered toxic, if the collection process were properly controlled. The problem arises whether a collector of these various products contaminates it with a product truly hazardous by nature.

PCB's have been mentioned. PCB's is not a molecule found in nature. It is a manmade molecule. It does not appear in waste crankcase oils, nor does it appear in lubricating oils, nor does it appear in waste oil in general. Its primary use is as a heat transfer agent in transformers, so that if in fact we controlled the persons who utilize transformers—which I might add no longer are being manufactured—and if we controlled the collection process, we would not find it in waste oils. Therefore, whether we remove the impurities from the waste oil, it certainly can be referred to as a fuel. I will refer to a chapter in Mr. Schmidt's book, "Fuel Oil Manual," bear with me, please. I am taking a selective chapter where it says there is marked difference between lubricating and fuel oils.

Actually, lubricating oils would make better oils for combustion than fuel oils. That is Mr. Schmidt who works for Allied Chemical Co. and who has written this manual. In fact, for the specific gravity of the existing lubricating oil, it contains much greater Btu value than residual oil. Residual oil tolerances can be and shall not exceed, by American Petroleum Institute standards, 2 percent.

Lubricating oils have far less than 2-percent contaminants. So in fact I am saying that they are a viable alternate fuel. There are various problems, and I am sure the committee wants to address the problems, not a hypothetical situation, but a realistic one. It seems to me an oddity. In fact, the committee has not addressed the problem of waste oil burners. They are stating that apartment house boilers are using waste oil, knowingly or not, but why does the department—and I say the department, I mean it could be air resources, it could be EPA, someone, DER—why don't they address the waste oil burners that they have consented to allow to operate in the various sites throughout not only this State, but every State in the Nation?

The Department of Consumer Affairs has gone on record as stating that, if you have the consumer affairs license, you can utilize a waste oil burner. My God, what does consumer affairs know about waste oil burners? Where do they consent?

Maybe you consider this a minor problem, but it isn't. The waste oil collection business is radically being hurt by the use of—indiscriminately, I might say—this is a problem, because the waste oil used in these burners is not being processed. It is being used as raw material and the toxic pollutants inherent in that product certainly are being emitted to the atmosphere.

So I would like the committee to also address the problem of these unlicensed waste oil burners permitted by the various—thank you, counsel. I don't know; counsel has given to me various advertisements of these waste oil burners. All of them state that they are licensed, that they are permitted, that they do not harm the environment, and they don't say to clean up your act before using. I don't know if counsel will agree to let the committee have these, but I am certain copies can be made available.

Mr. **Maiman**. My name is Melvin Maiman, for the record. I am adding to Mr. Berkowitz' testimony only by submitting these four advertisements in connection with waste oil burners he just referred to. We will leave them with the committee if you care to request them.[4]

Mr. **Berkowitz**. I would like to address another problem if I may. I might be running past the 10-minute limitation.

Mr. **Bedell**. Could I find out from the two of you—Mr. Wells had an appointment; he stayed over—I wonder if it would be agreeable with both of you if he goes ahead and gives his testimony? Then you can stay there if you wish and come back. Would that be of help to you, Mr. Wells?

Mr. **Wells**. Yes, sir, it would.

Mr. **Bedell**. If that is agreeable to Mr. Molinari.

Mr. **Molinari**. I appreciate it.

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[4] Material referred to is being retained in subcommittee files.

Mr. **Bedell**. We certainly apologize to you for the delay we have had here. It has been hard to get everybody in.

TESTIMONY OF JAMES WELLS, NEW YORK OIL HEATING ASSOCIATION, REPRESENTING EMPIRE STATE PETROLEUM ASSOCIATION

Mr. **Wells**. Thank you very much, Mr. Chairman. I have given a copy of my statement, which I prepared, to the stenographer earlier. However, in the interest of time, I may alter it somewhat.

Mr. **Bedell**. That would be great.

Mr. **Wells**. For the record, my name is James Wells and I am the executive vice president of the New York Oil Heating Association, a trade association comprised of approximately 200 firms engaged in or associated with heating oil distribution in the Metropolitan New York City area. Because the problem under discussion extends far beyond the geographical boundaries of New York City, the Empire State Petroleum Association representing heating oil and motor fuel resellers throughout the entire State of New York has asked that it be recorded that they join with me in this testimony.

I am also attaching to my testimony today a copy of a statement, or the basis for our statement, which is given by our association at a public hearing held last Friday in New Jersey, which I believe Mr. Tyler alluded to in his statement earlier.

My purpose here is twofold: One, to acquaint you with certain aspects of the toxic waste disposal problem, which I am not sure the committee is familiar with; and two, to inform you exactly how and to what extent our heating oil industry, often maligned by government as well as in the press, has labored to identify and stop the flow of off-specification heating oil into New York City, not as something else, but as heating oil.

By off-specification oil, I use the term generically for any heating oil to which has been added certain toxic or other waste materials. It is my intent also to inform you that the cooperation received by our industry up until about a week ago from all levels of government and from all levels of environmental agencies has been approximately zero.

I was going to give a brief sketch and go through a long, sad story about the agencies, with whom we had met, the environmental agencies, and tell you the problem still exists today as badly as it did when we first started bringing this to the attention of the environmental agencies as far back as 1977, 1978, and 1979. That is in my prepared statement. I wouldn't bother you with a long tale now of the people who have met with us and really not given us any cooperation, but this would include the city agency with whom we met. We met with the people in the State and we communicated by mail and asked for meetings with the Federal Department of Environmental Protection, and received a letter saying they would keep us informed.

They did not respond to my request for a meeting, but said they would keep us informed. This was last spring; we have not heard from them since.

Finally in July 1981, the futility of our waiting for any governmental assistance, intervention, or even cooperation decided us to embark upon an investigation of our own. We appropriated from within our association some $40,000 as a special fund and retained the services of a highly qualified environmental lawyer. We contracted for the services of two private investigation firms and a bonded private testing laboratory.

Our aim was to develop a body of evidence to support our contention that off-specification oil was being brought into New York City and being sold as heating oil and in what we believed to be in violation of certain New York City and State air quality codes.

Mr. **Bedell**. Excuse me, Mr. Wells.

Mr. **Wells**. Yes, sir.

Mr. **Bedell**. If you have a letter that you had sent to the EPA and have not had a satisfactory reply—which I understand you are telling us—do you have a copy of that letter available to the committee?

Mr. **Wells**. Yes, sir, I have a letter that gave me a reply and said they would keep us informed, that they didn't believe they were in much of a position to help us at the present time. I have the letter.

Mr. **Bedell**. We would ask you give the committee both your letter and the EPA reply. Committee staff will try to see what we can do to try to get a more satisfactory reply for you.

Mr. **Wells**. I have it with me; yes, sir. During the course of our investigations to which I just alluded, our paths crossed several times with the team from "20/20" to which you have alluded. We cooperated. We found that since we were working the same side of the street, so to speak, we cooperated with them.

Basically what we found confirmed each other's findings. As far as our investigation, we tracked waste oil from a variety of collection facilities to areas within the city of New York where the adulterated product was then mixed with good heating oil and ultimately delivered to industrial and commercial users in the five boroughs of New York City. We then sampled these commercial users' storage tanks and had the samples tested for conformance with regular fuel oil specifications.

We looked specifically at sulfur because there were rules on high sulfur and we thought this would be the easiest thing to catch. We found in this oil the presence of high sulfur and high lead, both of which are in violation of the New York City air pollution code. Let me stress parenthetically that neither we nor any other agency has found any evidence of such product going to private homes.

Let me make it abundantly clear that the end users are and must be large buildings with large storage tanks which can utilize No. 4 or No. 6 oil. As did the TV investigations referred to before, we felt that once we had gathered this body of evidence, our fieldwork would end with the delivery of our data to the various law enforcement agencies and regulatory authorities empowered to act in this particular area.

We felt that certainly now we would get some action. Again we were mistaken and disappointed. As far as we have seen up until recent weeks, there has been no movement on the part of any Environmental Protection Agency at any level of government to really do anything about this.

Only very recently—in fact, within the past several days—we have detected a willingness on the part of certain regulatory and law enforcement agencies to act upon the type of presumed violations we have made known to them. Our hopes have risen slightly, but, based upon our 4 years of frustration at the inaction and indifference of the agencies charged by law to deal with these problems, we are understandably cautious about preparing any victory celebrations. The immediate solution to the problem I have outlined seems to be incredibly simple.

I am told that there presently exists ample legislation and regulations to stop the use of nonconforming oil. Indeed, there isn't time to go through a long, drawn-out process of creating new legislation.

Frankly, what is needed now is enforcement of existing legislation and regulations. If those engaged in the sale, purchase, or transportation of off-specification oil choose to ignore the laws and regulations presently on the books, quite probably they would continue to ignore any new or additional legislation as well. What is needed, I repeat, is enforcement.

All it really takes is proper inspection, sampling, and testing of tanks of the suspected users of off-specification oil. Where such tests indicate the presence of pollutants, the heating or processing plant should be shut down immediately, the owner heavily fined, and required to have the storage tanks pumped, cleaned, and filled with conforming oil.

If the monetary risk of using such tainted product exceeds the monetary reward, it would follow that the use of this product would become uneconomical and would cease. This is the same method successfully employed in Philadelphia a few years ago. There is no reason to assume that it would not work here in New York City as well.

I hope it will be clearly understood here that it is not the heating oil industry which is on trial in this instance. I say this because if you watched the program "20/20," immediately after, when the local station came on, anyone not familiar with what was happening here was that heating oil deliverers are delivering all this tainted product all over the city of New York.

I have tried to explain to you why we have tried to clean up our act. We have tried to identify what is going on. I don't really think that our industry is on trial in the city of New York. I think it is Government that is on trial. I think the public is entitled to know whether or not Government agencies such as the various environmental protection agencies brought forth with so much fanfare and expense years ago have the capability and the resolve to do the things for which they were created.

I sincerely hope that with remarks of Mr. Kaston today that my cynicism will be proved wrong in the next few weeks. I hope the investigation he tells me, and that others tell me may soon be started, will be successful and I further hope that appropriate publicity will attend the prosecution of those buying, transporting, or selling nonspecification product.

Oil which conforms to all appropriate standards and priced accordingly cannot coexist with a product which has been adulterated with toxic wastes, used transmission fluid, tank bottoms, and waste lubricating oil. If this problem is not soon corrected, you will some day have only adulterated oil being sold to commercial establishments and apartment houses because the legitimate dealer could well have been forced out of business.

It should also be recognized that if no one makes an attempt to stop or at least police the nonconforming oil entering this area, the temptation for legitimate dealers to handle this product increases proportionally. Why not? The message given so far is that nobody really cares. I hope the efforts of this committee may be enlisted to rectify this perilous situation before it is too late. I hope some agency will recognize that there are only about 6 weeks left in this heating season; if the various environmental agencies don't conduct their tests soon, it will be too late, and they will have, for reasons best known to themselves, stalled a solution to this problem for yet another year.

I appreciate the opportunity of offering my testimony and I will endeavor to answer such questions as you might have for me. Thank you very much.

[The prepared statement and attachment of Mr. Wells follow:]

PREPARED STATEMENT OF JAMES R. WELLS, EXECUTIVE VICE PRESIDENT, NEW YORK OIL HEATING ASSOCIATION

My name is James R. Wells and I am the executive vice president of the New York Heating Oil Association, a trade association comprised of approximately 200 firms engaged in or associated with heating oil distribution in the Metropolitan New York City area. Because the problem under discussion extends far beyond the geographical boundaries of New York City, the Empire State Petroleum Association representing heating oil and motor fuel resellers throughout the entire State of New York, has asked that it be recorded that they join with me in this testimony.

I am also attaching to my testimony today a copy of a statement given by our association at a public hearing held February 5, 1982, for and on behalf of the New Jersey Department of Environmental Protection relative to the listing of waste oil as a hazardous waste and requiring the manifesting of the same.

My purpose here today is twofold: (1) To acquaint you with certain aspects of the toxic waste disposal problem of which this committee may not be aware, and (2) to inform you exactly how and to what extent our heating oil industry often maligned by government as well as in the press, has labored to identify and stop the flow of off-specification heating oil into New York City. By off-specification oil, I use the term generically for any heating oil to which has been added certain toxic or other waste materials.

It is my intent also to inform you that the corporations received by our industry up until about a week ago from all levels of government and from all levels of environmental agencies has been approximately zero.

Let me give you a very brief historical sketch of this problem as viewed by our particular industry in New York.

As far back as 1977 and 1978, the sales departments of some of our member firms began experiencing buyer price resistance to competitively priced conforming No. 4 and No. 6 heating oil. Generally, it was determined by these companies that the principal price competition was coming from firms selling what was euphemistically referred to as "reprocessed oils."

As OPEC drove the price of legitimate oil up to nearly the dollar mark (and by legitimate oil, I refer principally to that oil which conforms in all respects to the very strict New York City 0.3 percent sulfur content requirement) the price of the so-called reprocessed oil was often sold at a 25-percent discount to unsuspecting or otherwise careless landlords and commercial consumers in the city of New York.

This problem with non-conforming reprocessed heating oil reached such proportions that on November 14, 1979, we communicated by mail with the Commissioner of the New York City Department of Environmental Protection outlining the problems of off-specification oil, its sources and uses. We stated that burning this product was in violation of New York City air quality codes and requested that tests be made and violations issued, where appropriate.

To the best of our knowledge, we received no action upon our request.

On November 21, 1980, a delegation from this Association met for several hours with the New York City Department of Environmental Protection Air Resources staff to inform them once again that the off-specification oil problem had increased dramatically. We again outlined several of the sources of this product and requested city inspections, product sampling, testing and other appropriate action to stop this flow of reprocessed oil.

To our knowledge, the result was the same as before. No action was taken and the problem continued to worsen throughout 1981.

Deciding on another course of action and, inasmuch as to the best of our knowledge and belief, this non-conforming product was being brought to New York City from out of State, I communicated on May 20, 1981, with the Federal Environmental Protection Agency outlining the situation and asking their assistance in enforcing the air quality codes which we believed were being violated by the importation of this "reprocessed product" into New York City.

Five or six weeks later I received a reply to my letter giving us ample sympathy but reminding me that severe budget constraints had taken away the agency's air program staffers and, therefore, unfortunately, the Federal Government would be unable to offer much help to us.

Our Association, finally recognizing in July of 1981, the futility of waiting for any governmental assistance or intervention or indeed even cooperation decided to fund its own investigation. Appropriating approximately $40,000 as a special fund, this Association retained the services of a highly qualified environmental lawyer and contracted for the services of two private investigating firms and a bonded testing laboratory. Our aim was to develop a body of evidence to support our contention that off-specification heating oil was being consumed in New York City in violation of air quality codes.

During the course of this investigation conducted during the summer and fall of 1981, we crossed paths several times with a team from a TV station looking into the toxic waste aspects of this very same problem. We cooperated and shared information with these fine TV reporters and indeed our separate investigations tend to support each other's findings completely.

Briefly, we tracked waste oil from a variety of collection facilities to areas within the city of New York where the adulterated product was then mixed with good heating oil and ultimately delivered to industrial and commercial users in the five boroughs of New York City.

We then sampled these commercial users' storage tanks and had the samples tested for conformance with regular fuel oil specifications. We found in this oil the presence of high sulfur and high lead—both of which are in violation of the New York City Air Pollution Code.

Let me stress parenthetically that neither we nor any other agency has found any evidence of such product going to private homes. The end users are and must be large buildings with large storage tanks which can utilize No. 4 or No. 6 oil.

As did the TV investigators referred to before, we felt that once we had gathered this body of evidence, our field work would end with the delivery of our data to the various law enforcement agencies and regulatory authorities empowered to act in this particular area. We felt that certainly now we would get some action.

Again we were mistaken and disappointed. Not only did the TV exposé referred to in Congressman Molinari's February 1 statement fail to motivate any governmental agencies, but our own documentation presented to the several different agencies at various levels of government apparently left them unmoved as well.

Only very recently—in fact, within the past several days—we have detected a willingness on the part of certain regulatory and law enforcement agencies to act upon the type of presumed violations we have made known to them. Our hopes have risen slightly, but based upon our four years of frustration at the inaction and indifference of the agencies charged by law to deal with these problems, we are understandably cautious about preparing any victory celebrations.

The immediate solution to the problem I have outlined seems to be incredibly simple. I'm told that there presently exists ample legislation and regulations to stop the use of non-conforming oil. Indeed, there isn't time to go through a long drawn out process of creating new legislation. Frankly, what is needed now is enforcement of existing legislation and regulations. If those engaged in the sale, purchase and/or transportation of off-specification oil choose to ignore the laws and regulations presently on the books, quite probably, they would continue to ignore any new or additional legislation as well. What is needed, I repeat, is enforcement.

All it really takes is proper inspection, sampling and testing of tanks of the suspected users of off-specification oil. Where such tests indicate the presence of pollutants, the heating or processing plant should be shut down immediately, the owner heavily fined, and required to have the storage tanks pumped, cleaned and filled with conforming oil. If the monetary risk of using such tainted product exceeds the monetary reward, it would follow that the use of this product would become uneconomical and would cease. This is the same method successfully employed in Philadelphia a few years ago; there is no reason to assume that it would not work here, given the resolve and proper implementation of the appropriate environmental agencies.

I hope it will be clearly understood here that it is not the heating oil industry which is on trial in this instance. We have tried for over four years to clean up a dangerous and illegal problem plaguing our industry. Rather, we charge that government itself is on trial here. The public is entitled to know whether or not government agencies such as the various environmental protection agencies brought forth with so much fanfare and expense years ago have the capability and the resolve to do the things for which they were created.

I sincerely hope that my cynicism will be proved wrong in the coming weeks. I hope that the investigation I am told may soon be started will be successful and I further hope that appropriate publicity will attend the prosecution of those buying, transporting or selling non-specification product. Oil which conforms to all appropriate standards and priced accordingly cannot co-exist with a product which has been adulterated with toxic wastes, used transmission fluid, tank bottoms and waste lubricating oil. If this problem is not soon corrected, you will someday have only adulterated oil being sold to commercial establishments and apartment houses because the legitimate dealer could well have been forced out of business.

It should also be recognized that if no one makes an attempt to stop or at least police the non-conforming oil entering this area, the temptation for legitimate dealers to handle this product increases proportionally. Why not? The message given so far is that nobody really cares.

I hope that the efforts of this committee may be enlisted to rectify this perilous situation before it is too late. I hope some agency will recognize that there are only about six weeks left in this heating season; if the various environmental agencies don't conduct their tests soon, it will be too late, and they will have, for reasons best known to themselves, stalled a solution to this problem for yet another year.

I appreciate the opportunity of offering my testimony and I will endeavor to answer such questions as you might have for me. Thank you very much.

[Attachment]

STATEMENT OF POSITION OF THE NEW YORK OIL HEATING ASSOCIATION CONCERNING PROPOSED AMENDMENTS: N.J.A.C. 7:26-7.4, 7.5, AND 8.15

This statement has been prepared for the New York Oil Heating Association which is composed of over 150 companies that market and distribute fuel oil in the New York Metropolitan Area.

The New York Oil Heating Association fully supports the proposed regulation requiring the listing and handling of waste as a hazardous waste. Additionally, the requirement to manifest waste oil from generation to disposal will give the state critical information on where the waste oil streams currently are going.

It is no secret that the term "waste oil" is a generic term which covers broad categories of product, including hydraulic fluids, crankcase oils, tank bottoms, spend solvents, etc. The commingling of various waste products, some of which are of a very hazardous nature, and the blending of this material into residual fuel oil with resultant sale of this product as residual fuel oil has resulted in a public health and safety issue, the magnitude of which both government and the public are only now becoming fully aware of.

The members of the New York Oil Heating Association have experienced, over the past several years, the marketing of so-called non-conforming residual or No. 6 fuel oil at substantial discounts. An investigation funded by the Association disclosed that waste oil, using this term very broadly, was being assembled at certain facilities in New Jersey and then transported to New York City and sold as residual fuel oil to apartment houses and businesses. In addition, members of the Association who also do boiler maintenance work have found that many boilers they service have been malfunctioning, and the residue of materials left in the boiler indicate that a product in addition to residual fuel oil has been consumed as fuel. There is no doubt that the same practice may be occurring in the parts of New Jersey where residual fuel oil is also used. One does not need a great deal of imagination to realize that the waste oil and its additives blended in residual fuel oil and consumed in apartment house and inefficient commercial boilers can result in a severe adverse impact to air quality and public health.

Evidently, one of the enforcement problems that New Jersey and New York have experienced in attempting to curtail this problem has been that the definition of residual fuel oil contains requirements for viscosity, pour point, water in sediment, flash point, and sulfur. The only enforceable qualitative or numerical criteria for residual fuel oil was the percent by weight of sulfur content. Since the blending of liquid hazardous wastes with waste oil might not effect the sulfur content, the regulatory agencies were faced with an enforcement dilemma. Part of this dilemma has been resolved by New York and New Jersey's recently promulgated hazardous waste disposal regulations, but the lack of quality criteria or numerical thresholds as to what can and cannot be contained in residual fuel oil is lacking. We would therefore respectfully submit to the New Jersey Department of Environmental Protection that they establish such numerical or qualitative criteria concerning the definition of what residual oil is. This would enable a quick sampling and determination of whether a particular load of residual oil is in conformity to regulatory requirements.

As long as large sums of money are involved in the disposal of liquid hazardous waste and as long as there are people who will take the hazardous waste and profit by blending it into a fuel oil and selling this material as fuel oil, the problem will exist. However, the aggressive enforcement of existing and proposed regulations in this area will do a great deal to eliminate this problem.

Again, the New York Oil Heating Association welcomes this step by New Jersey in listing waste oil as a hazardous waste, but this action will not be meaningful, unless the enforcement personnel of the agency aggressively implement the program.

Mr. BEDELL. Thank you. Again, we appreciate your staying with us this late. We appreciate the fact that some others have let you go ahead of them because of your time problem.

Mr. Molinari.

Mr. MOLINARI. I must make one or two observations.

Mr. WELLS. Sir, I am going to look for that correspondence while the Congressman is talking.

Mr. MOLINARI. Fine.

Mr. BEDELL. You do not really need to do that. I think, Mr. Molinari, if he will just get that to your office.

Mr. MOLINARI. Sure. I am very concerned about what you have to say.

I want to point out a couple of things to you. It did not take as long as you thought for reaction to set in, because I happened to catch an article that was in one of the New York newspapers that reported the results of your own testing. That is what attracted my attention to this field. I started doing some studying with my staff. We subsequently put out a press release of our own.

Somehow the directors of "20/20" picked that up and called us in and shared with us the information that they had well before it was aired on TV. As a result of that you can see even today this hearing has emanated all from the story which you had originated.

Mr. WELLS. Yes, sir.

Mr. MOLINARI. So I think certainly the people of this State and the people of New Jersey and virtually the entire Nation owe your association a debt of appreciation for getting us moving in this very important area. Indeed, it is not the members of your association that are on trial. You fellows did a trial that government should have done. I tell you this; I mean it very strongly. If you have a problem meeting with EPA, and I know I have Congressman Bedell to back me up on that, I will see to it that the meeting will be set up. I mean in a matter of days.

Mr. WELLS. We will meet anytime, sir.

Mr. **Molinari**. OK. One question I would like to ask at this time. In your own testing, how did you go about evaluating where to test those that you suspected?

Mr. **Wells**. We followed trucks, sir. We had our investigators, and we felt that it must be a rather strange reason for a truck selling oil to a consumer or an apartment house in one of the five boroughs of New York to have to go all the way down to south Jersey or Philadelphia to pick up product when there was certainly an ample supply here in New York. So we followed trucks engaged in practices like that. After they made their deliveries, why, we took a sample of those tanks and turned them over to a private testing laboratory to give us the results.

Mr. **Molinari**. You found sulfur and lead?

Mr. **Wells**. Yes, sir.

Mr. **Molinari**. No PCB's?

Mr. **Wells**. We were not testing for that.

Mr. **Molinari**. It might have been in there?

Mr. **Wells**. Could well have been. A very interesting thing. One of the reporters told me and may have told you that in one of the trucks they had following that had come from Quanta and was delivering to New York City, the truck went down the road and dropped off some of this product at one apartment house. He left a ticket. They got the ticket afterward; the delivery ticket I am referring to. It said 3,000 gallons of No. 6 oil, 3,000 gallons of No. 6 oil, and the driver's signature, Nick.

He went down the road a little further. Out of the same truck he made a delivery and left a ticket, 3,000 gallons No. 4 oil, signed it Al. So I mean this is the stuff that is going on. I am not trying to say that there are not people in this business who are truly trying to re-refine products, and it may be just as good as any other. But I am saying there is no policing of this, and no one knows what is coming in here.

Mr. **Molinari**. What did your investigation reveal relative to prices? Obviously they were selling cheaper.

Mr. **Wells**. Oh, yes, sir. In some cases 25-percent cheaper. They were delivering into apartment houses at prices cheaper than we could buy in cargo lots in the New York Harbor, let us say from an Exxon or a Gulf or somebody like that.

Mr. **Molinari**. I am delighted——

Mr. **Wells**. Not only selling, but advertising in the press.

Mr. **Molinari**. So I understand. Let me say this to you. I do not want to hold up the rest of the people that are here waiting to testify. I am delighted that you stayed long enough. I know it was a hardship for you to do so. But I think your testimony is very critical. I hope that you and I can sit down also and follow this and pursue this a little further so we can pick up and carry the ball.

Mr. **Wells**. I must also remark, Congressman, that your staff did contact me in the middle of November when they knew we were involved in this, and we have kept in touch.

Mr. **Molinari**. Thank you very kindly.

Mr. **Bedell**. Thank you, Mr. Molinari.

Mr. Wells, very quickly.

Mr. **Wells**. Yes, sir.

Mr. **Bedell**. You say there are problems of government. Would you care to say where those problems are? Is it at the local level, the State level, the Federal level, EPA, all of them, or what?

Mr. **Wells**. We have met with all levels, sir. I am not saying that they are not correct in telling me that they are understaffed and they cannot do this. They do not have the proper amount of people to do their field work. I can certainly sympathize with their problems. But the fact that this oil is being delivered and used is there, and they should find a way to do it.

Mr. **Bedell**. By "they" do you mean all levels of government, or the Federal Government?

Mr. **Wells**. Yes, sir, all levels. I would not try and define the separation of roles of who is responsible in what areas, but I know that the problem goes across State lines. So I would assume that the Federal Government has to take the lead in this somewhere.

Mr. **Bedell**. I assume there is really no way for consumers to know whether there is a problem with the oil they are buying; it is going to have to be some government entity that is going to have to regulate and test it.

Mr. **Wells**. That is correct; yes, sir. Our testimony presented to the hearing last Friday was to commend the process Mr. Tyler outlined to you that New Jersey is doing. We are not saying that anybody who operates a reprocessing plant, that there is anything wrong with them. We have no quarrel with these people. We just want there to be a system of inspections, of manifests and control.

Mr. **Bedell**. Apparently—I talked to Mr. Schlessel, who is here in the audience—I take it from him that it is not a particularly difficult thing to test this oil to determine if there are contaminants. That is my understanding.[5]

Mr. **Wells**. No, sir, it is not difficult at all. All it takes is a small sample, like a quart, to a testing laboratory, and there are a number located right here in the New York area. They can have a report in a day for you.

Mr. **Bedell**. If I understand him correctly even that testing is not a particularly difficult thing to do at the laboratory.

Mr. **Wells**. No, sir, it is neither difficult nor expensive.

Mr. **Molinari**. Except that you have to know what you are testing for. They are going to test only exactly for what you ask.

Mr. **Wells**. That is correct.

Mr. **Molinari**. There could be a lot of other harmful contaminants in the product, and if they are not being tested for, they will not be found.

Mr. **Wells**. That is correct. We were testing primarily for sulfur and leads.

Mr. **Bedell**. We appreciate again your staying with us so late.

Mr. **Wells**. I have these letters we discussed.

Mr. **Bedell**. Mr. Molinari, would you like them to go into the record?

Mr. **Molinari**. I would like them to go into the record, if you would.

Mr. **Bedell**. We can keep these copies, can we not?

Mr. **Wells**. Yes, sir.

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[5] See app. C.

Mr. **Bedell**. Thank you.[6]

We want again to thank you fellows.

Mr. Berkowitz, I think we kind of interrupted you.

Mr. **Berkowitz**. I am in favor of using these waste oils if it is economically feasible to bring these back as base lubricating feedstocks. But in doing so, do understand that the process that exists today generates waste in itself. So are we compounding the problem? We are saying we are going to get rid of one waste by recycling it, and in doing so, generate a new form of waste that also is a problem to dispose of. I am in favor. I will go on record of bringing these products back as lubricating stock, but also, understand, in doing so you generate a fuel oil, the distillates and other types of oils that are found in the collective supply do contain fuel oil. There is no other marketplace but to bring them back to the fuel oil market. I am certain Mr. Booth's testimony will bring that forward.

I might also state I am here as a representative of the association. But I as a private individual have been for a number of years trying to site a legitimate permittable facility for either the reclamation of oil and/or solvents. I can tell you of my own personal problems. Unfortunately the committee does not have time, so I will summarize and say that this 6 months to a year period is an exaggeration. It certainly is in excess of 2 years.

The way the law now reads, it requires a person who is willing to jeopardize and invest private venture capital, that he make his investment, then apply for permits, and then roll the dice on whether or not this facility will be permitted, or his investment is lost. I think that in itself discourages persons from investing in a facility that in fact the State and Nation needs. So that if there is any way possible to expedite the permitting process, were it to be found, I think that is where the culprit really is.

In fact, facilities that have existed for a number of years, most of them still do not have permits. The ones that are operating are operating on consent and are not necessarily true legal facilities. But they do have a consent. Yet the new siting law, part 361 in New York, requires that a board, which is made up I believe of the local residents of a community, be the governing board.

What technical expertise do these people have? They have not permitted homeless people to reside in their communities. They have not permitted people with mental retardation to reside in their communities. Why have us believe they are going to permit persons with hazardous wastes to process them in their communities, and including the State environmental facilities corporation still to this date has not been able to site the State's own facility for cleaning up hazardous wastes. I cannot believe that in this day and age when we recognize that we have a problem, we have no solution for the problem. It just seems very unfair.

Gentlemen, with that, I know that time is going by. I will leave you. The problem still has not been resolved, nor is it anywhere near being resolved. I would make my association and my time available for the committee to discuss this matter further. Thank you very much for your time.

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[6] See app. D.

Mr. **Bedell.** Thank you. We would ask you, if you would, to wait. We want to hear from Mr. Booth; I may have to leave. Mr. Molinari will have an opportunity to question both of you. I, like so many other people, may have to leave to catch an airplane here.

We appreciate your patience, Mr. Booth, for the fact you have waited so long. Thank you.

TESTIMONY OF GEORGE T. BOOTH III, PRESIDENT, BOOTH OIL CO., INC., BUFFALO, N.Y.

Mr. **Booth.** I thank you for the opportunity to speak today. I have prepared remarks that provide more detail.

Mr. **Bedell.** Your remarks will be entered in the record.

Mr. **Booth.** My name is George T. Booth III, president of Booth Oil Co. in Buffalo, N.Y. I am also vice president of the Association of Petroleum Re-refiners. I am here to primarily represent Booth Oil Co., although our views pretty much follow those of the Association of Petroleum Re-refiners.

Just a brief history. Booth Oil Co. is a re-refinery. My grandfather started it in 1922 as a sole proprietor, recycling used automotive crankcase oils as form oil to the construction industry. Today is our 60th year, and third generation in the business; and we are New York State's only bona fide re-refiner, perhaps the only bona fide re-refiner in the Northeast.

We are currently constructing a new state-of-the-art re-refinery in the city of Buffalo, and I certainly can appreciate some of Irving's comments about the permitting process. We are still waiting for our operating permits now, though we are operating under consent, as he puts it. Our new plant will be able to process upwards of 8 million gallons annually. The plant has been designed with expansion in mind, when the environmental and economic factors warrant it. We have a wastewater treatment plant, and an industrial oil reclaiming plant. The used crankcase oil distillation plant is presently under construction. The other parts of the plant are complete. I will take this time to say that certainly any members of the committee are welcome to come to Buffalo and tour the facility.

Mr. **Molinari.** After the snow season.

Mr. **Booth.** We do have a lot of that this year.

I know a lot of terms have been used today, re-refining, recycling, et cetera. I would like to read to you the ASTM definition of re-refining. It seems that there is a slight problem of differentiation. Recycling is normally the generic term used for any secondary use or reuse of a product. The ASTM definition for re-refining is: The use of refining processes on used oil to produce high-quality base stock for lubricant and other petroleum products. Re-refining may include distillation, hydrotreating, and/or treatments employing acids, caustics, solvents, clay, and/or other chemicals.

As you see, the definition implies quite a severe cleaning of the product. Apparently during the "20/20" show there were many people that were referred to as re-refiners when in fact they might have been processors or recyclers. I would certainly like to clear the air on that issue.

Why re-refining? There are a number of factors mandating that re-refining capacity should increase. It would tend to reduce our dependence on foreign sources of oil, preserve an exhaustible resource and help to protect our air and water from indiscriminate burning and dumping of waste oil. Finally there is energy conservation, in that less energy is consumed to re-refine a barrel of oil than to make the same barrel from virgin crude. I will not go too much into the discussion about the indiscriminate and uncontrolled burning of waste oil. Many of the other speakers have commented on those problems.

I would like to speak about the impediments to re-refining, what we view both as a company and as an association. Certainly the issue of indiscriminate burning is a major impediment to any of the re-refiners.

Mr. MOLINARI. Would you mind an interruption?

Mr. BOOTH. No.

Mr. MOLINARI. What do you mean by the term "indiscriminate burning?" We have heard that used a lot today.

Mr. BOOTH. That is next. I have it here. I believe that as we refer to it, indiscriminate, or uncontrolled, perhaps there are two. First, it is minimally treated. It may involve just dehydration at most, might include some filtering. It is the burning in improper boilers with improper stack controls or improper modifications. There are certain package boilers that really cannot burn waste oil. There are certain types of boilers that probably can. Of course, indiscriminate can also include surreptitious mixing of the hazardous wastes, as we have been talking about. Also, indiscriminate burning could include the mixing of used oil with virgin fuels, and not telling the consumer that he is getting, I guess I would say, a blended product. I will talk more about that when we discuss the National Bureau of Standards work.

There may be a solution to that. I am not sure. Certainly this type of burning affects our source of supply, the re-refiner's source of supply. It raises the price because it is competing directly with virgin fuels, which is often the case. Basically the people who process fuel this way or sell it without any processing can pay more because their costs of capital and their costs of operation are lower than the re-refiner.

I will say as a re-refiner today, that the price of lubricating oils has reached a point where we have felt as a company that there are profits to be made by making lubricating oils. Certainly then the issue of the mixing of hazardous waste has come up. Certainly it is very clear why that is profitable, because the people are paying. They handle material, then blend it as fuel, and really in a sense are getting paid twice. Then, of course, the point about the unknowing consumers who are in some cases probably paying close to virgin prices, maybe just slightly discounted, which means that the price of the waste oil is high as a result. So one finds a double-edged sword. You have less supply and higher prices.

This, of course, creates reluctance of new entrants into the field of re-refining, making it hard to attract capital investment. Some of the reasons for the need for the capital investment have been mentioned several times today, and I know in some of the prepared statements there was mention of the old process of re-refining, which is an acid clay process, regarding which I will not go into much detail, had some technological problems and produced a sludge that was difficult to dispose of. Today's technology is much more capital-intensive, involves refining techniques, and much costlier equipment.

I could talk about the fact that re-refiners are basically small businesses. That has also been mentioned today. Our ability to attract capital is obviously at best very difficult. We built our plant using an industrial revenue bond that was guaranteed by the Small Business Administration under that pollution guarantee program. We were very fortunate in the year that we applied—which was early 1980—the program was still allowing guarantees on tax-exempt issues. We believe we are the first in New York State, perhaps the only industrial revenue bond that was guaranteed in New York State.

From everything we have heard today, in addition to what the chairman mentioned about the SBA not guaranteeing tax-exempt issues anymore, there have been several other rule changes, such as the requiring of the principal to be amortized evenly over the course of the bond. Of course that makes the front-end costs much higher.

There are other various changes I guess were brought on by OMB, and the SBA personnel on this particular case chose not to argue with OMB. So, unfortunately, the program has basically been decimated. Were it not for that program, we would not have been able to build our plant.

Another problem a re-refiner faces is the fact that, again, as a small businessman with limited resources, R. & D. is very difficult. It is at best a very minimal effort on our part.

No one today has brought up the issue of the Department of Energy and the work they have been doing for the re-refining industry. We are currently recipients of a grant from the Department of Energy on what is called a data acquisition study where we will be publishing several reports relating to our experience with getting our environmental permits, our construction, and first year of operation. We understand right now that the entire program is being threatened by the administration, and that there even exists the possibility that existing signed contracts will be terminated at midpoint. We strongly urge the committee to look into this and to support the continuation of these DOE programs.

I would now like to talk about the National Bureau of Standards. That has also been discussed today. As was mentioned, the Energy Conservation Act of 1975 promulgated work to be done by NBS for them to establish the substantial equivalency of recycled petroleum products to virgin products. The program has gotten well underway and has done a fantastic amount of work, not just on the recycled oil situation, but also in virgin lubricating oil. Little knowledge really existed on what base stocks were.

The work they have done, very closely in conjunction with another voluntary organization called ASTM, which you may be familiar with. The issue of the consumer knowing whether he is getting a recycled product could perhaps be answered by this NBS work, because the NBS work was done in phases. The first phase was fuel. Irving had the related report here. The second phase is motor oils, currently now in the fifth year of work, which has taken them much longer than they thought, unfortunately. The third phase is industrial oils.

Depending on how the Energy Conservation Act is read, the FTC could, in fact, promulgate rules that would require sellers of mixed fuels to notify the consumer that he was getting recycled oil in his product, just as the old labeling law did. If, in fact, the additions of waste oil to a virgin fuel made the product identifiable as being different than a virgin equivalent, then the consumer should be notified. The FTC has chosen not to proceed until the entire program is done. Now we understand again that OMB is threatening the existence of this ongoing program at the National Bureau of Standards. Again we urge the committee to support this work.

Finally, an area that has not been mentioned much today, yet substantially adds to it, not so much to the burning but the dumping of waste oil, is the do-it-yourselfers, which make up perhaps more than half the automotive oil changes in the country. The Department of Energy did a study on this. The study indicated that fewer than 10 percent of that oil is, in fact, being disposed of properly. We have all heard of the American Petroleum Institute. Several years ago they tried to have a sustained program of getting the do-it-yourselfers oil to the proper collection points. Unfortunately the hierarchy of the API elected not to fund, or at least not to give it very much sustained funding to continue that program.

A new program is currently under way with the Muscular Dystrophy Association. You may have heard of it. We are working very closely with them as one of the test markets. I certainly strongly urge congressional support of such a program.

For those of you who do not know what it is, the MDA program is working on—of course, muscular dystrophy gets free public service announcements, and it would be a sustained nationwide effort eventually—being designated receiving stations to receive the do-it-yourselfers oil. There would be specific collectors such as us who would be identified as the collector of that particular oil. There would be a sharing of the proceeds with the MDA on the sale of that waste oil. The gas station would perhaps get two-thirds and MDA one-third. That is really separately negotiated. MDA says that there are some 300 to 400 million gallons annually disposed of by the do-it-yourselfer. They can see a lot of money on a year-round basis. I am taking a lot of time here.

Mr. MOLINARI. That is all right.

Mr. BOOTH. We have talked about some of the programs that need congressional support. Certainly other areas of encouragement include enforcing of existing laws. I will not go much into RCRA, or New York State law. Certainly recycling regulations are long overdue from RCRA. We have worked with the staff. They have recently changed staff again. That unfortunately means that this person will have to be retrained, so to speak. From the looks of it, it appears there will be no bona fide work coming out of EPA for at least another 1½ years, which will make it some 5 years late.

There is also the possibility of modifications of the Clean Air Act. That could also have an effect on some of the indiscriminate burning.

I think another important area that needs to be addressed is public information and perception, such as more educational programs. New York State has a law where the energy department has been empowered to disseminate public information about re-refining, et cetera. Unfortunately, due to lack of money there has been little done.

Another organization that you have perhaps heard of is the National Association of Oil Recovery Coordinators, known as NAORC. That was partially being funded by Department of Energy. That funding is being cut off. That was a very good organization. I believe it is still in existence with a very limited budget.

I will offer an example of some of the problems NAORC faced. The New York State representatives' plane fares and meals were paid for by the funding of that organization so that they could come to the meeting in Raleigh last year. I find it very unfortunate that the States just have, I guess, abdicated the responsibility of the waste oil problems. As I said, my prepared statement covers these subjects and a few others in much more detail.

Again I would like to thank you for the opportunity to appear today. We certainly need your support to eliminate the unfounded bias against re-refined products and to maximize the energy conservation, resource recovery, and pollution control which results from re-refining.

Thank you.

[Mr. Booth's prepared statement follows:]

PREPARED STATEMENT OF GEORGE T. BOOTH III, PRESIDENT, BOOTH OIL CO., INC., BUFFALO, N.Y.

Mr. Chairman, thank you for the opportunity to appear at your hearing on waste oil recovery. Booth Oil Co., Inc. ("Booth") is a family owned company which has been in the business of waste oil recovery in Buffalo, N.Y. since 1922 when my grandfather started as a sole proprietor. Through the years, Booth's annual collections of waste oil increased and the company introduced more sophisticated recycling processes. My father, George T. Booth, Jr., currently our chairman of the board, developed the company's capacity to re-refine lubricating oils. We are now about to commence operations at our new production facility in Buffalo. This plant will utilize state-of-the-art technology and have a capacity for re-refining 8 million gallons of waste oil annually.

Today Booth is the only re-refiner in New York State. As you may know, the number of re-refiners in the United States has decreased drastically since the early 1960's. While the size of the industry has remained stable over the past few years, a number of factors mandate that re-refining capacity should increase, viz., the need to reduce dependence on foreign sources of oil, preserve an exhaustable natural resource and protect our air and water from indiscriminate burning and dumping of waste oil.

Before considering the specific issues on today's agenda, I would like to comment generally upon the re-refining process. Waste oil collection is only the first step in re-refining. Of the 1.2 to 1.4 billion gallons of waste oil generated annually in the United States, approximately 75 percent is collected. However, less than 10 percent of the annual total is re-refined. The bulk of collected waste oil is disposed of by burning.

Most of the waste oil which is burned is subject to minimal treatment. Typically, it might be dehydrated and, at most, filtered. The burning of such oil as a fuel introduces heavy metals and other contaminants contained in the oil back into the environment. Finally, the burning of waste oil represents the least effective form of resource recovery, i.e., only one use after the original use.

Re-refining, by way of contrast, allows for continued re-use of waste oil. The process of re-refining has been defined as follows:

"The use of refining processes on used oil to produce high quality base stock for lubricants and other petroleum products. Re-refining may include distillation, hydrotreating, and/or treatments employing acid, caustic, solvent, clay and/or other chemicals"[1]

Re-refined lubricant is equivalent to, or may even be superior to, lubricant refined from virgin crude. In the past, most lubricating oils used in the United States were refined from high grade Pennsylvania and Texas crude. These fields are now substantially depleted and U.S. refiners must rely increasingly upon foreign crude, which is inferior to Texas and Pennsylvania crude. In order to produce good lubricants, more foreign crude and additional energy (because of the process) are required. In sum, re-refining offers both energy conservation and resource recovery as benefits over refining virgin crude to produce lubricants or burning waste oils as fuel.

In addition to energy conservation and resource recovery, re-refining also results in pollution control. As I mentioned above, used oil is contaminated and, unless re-refined, contaminants remain in the waste oil burned as a fuel or spread on roads for dust control. Re-refining removes the contaminants and allows for their controlled disposal.

RECOVERY LEVELS

I understand your first concern in today's hearing is the level of recovery of waste oils. As I mentioned before, approximately 75 percent of all waste oil in the United States is, in the general sense, recovered. It is collected and much of it is used, at least a second time. While, at first glance, this high recovery rate appears to be a great accomplishment, it must be considered that:

1. The amount of waste oil which is not recovered, 25 percent, translates into 300 to 400 million gallons of oil annually; and
2. Less than 100 million gallons (approximately 7 percent) of waste oil are re-refined into lubricants and, thus, can be used over and over again.

The issue of recovery should be concerned not only with the additional 300–400 million gallons per year but also with a higher degree of recycling (more than the one re-use allowed by burning). I believe both of these issues can be addressed by the following program:

1. Encouragement of re-refining;
2. Enforcement of existing laws;
3. Support for current programs.

First, with respect to encouraging the re-refining industry I will make specific suggestions below under the discussions of economic, environmental and legal issues which are also on today's agenda. In general, capacity must be increased and this is best accomplished by eliminating impediments to capital investment.

Second, I endorse more aggressive enforcement of existing laws. For example, New York State sought to encourage re-refining in 1978 by an addition to the Environmental Conservation Law.[2] The legislation specifically requires that "all State and local officials shall act within their authority *to encourage the use of re-refined oil*"[3] (emphasis added).

The statute's statement of legislative intent argued the case for re-refining as follows:

"Re-refined products can be profitably produced and can be competitive with comparable virgin oil products with no economic dislocation and with definite advantages to the economy of the State. In order to promote resource recovery systems which preserve and enhance the quality of air, water, and land resources it is the purpose of this act to establish a program to promote the collection and re-refining of used oil."[4]

Against this background, the legislation calls for public education and regulation of collection facilities.[5] Education is necessary to inform the public that collection facilities exists and, more importantly, to remove the misconception that re-refined lubricants are inferior to the same products refined from virgin crude. The legislation required service stations to accept up to 5 gallons of waste oil per day from any individual without charge. This provision recognized the critical problem in recovery, viz., the "do-it-yourself" oil change which accounts for approximately one-half of all used motor oil (used motor oil constitutes approximately one-half of all waste oil generated annually in the United States) but of which only 10 percent is recovered.

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[1] ASTM definition.

[2] New York State Environmental Conservation Law, ("ECL") § 23-2301 et seq. (L. 1978, Ch. 740).

[3] ECL §23-2303.

[4] L. 1978, Ch. 740, §§ 1 and 8.

[5] ECL § 23-2303.

Since this legislation was enacted, we have not experienced a greater availability of waste oil or lower prices; rather the opposite has occurred. Since the legislation was passed, burning of waste oil as a fuel and no increase in recovery of such within New York State, have combined to raise prices for waste oil, decreasing the financial incentives for re-refining.

My third suggested response, support of current programs, also affects the means of enforcing existing laws. The Muscular Dystrophy Association ("MDA") is developing a program for collecting waste oil primarily from the do-it-yourself oil change sources. Through participating service stations, the MDA advertises and solicits contributions of waste oil. The collected waste oil is sold to a user, such as our company, and the proceeds of the sale are shared by the service station and MDA. This program was introduced with great success in Denver, Colo. and MDA is planning to develop this program in other regions. In addition to helping to realize the energy conservation, resource recovery and pollution control goals of re-refining, funds are generated to finance medical research. I ask you to endorse such efforts.

ECONOMIC FACTORS

In terms of the economics of recovery efforts, I will discuss three issues:

1. Regulation of burning;
2. Encouraging capital investment;
3. Support for research and development effort.

An important factor in the economics of recovery and re-refining is the increased cost of waste oil. As recently as 10 years ago, we could collect oil from industrial users or smaller service stations for free and, in some cases, even charge for the service of hauling it away. With the significant increases in the price of oil during the early 1970's, waste oil began to have value as an alternate source of fuel. Currently, prices for used crankcase range between 30 to 50 cents per gallon depending upon quantity, quality, and regional market. This charge is due, for the most part, to the increased demand for waste oil as a fuel. In turn, the increased cost of waste oil has made entry into the re-refining industry or expansion of existing capacity significantly less attractive from a financial standpoint.

It may be argued that the price increases caused by burning have encouraged recovery. This does not justify indiscriminate burning. There is an additional demand for waste oil as a "mixer" or "mask" for other hazardous wastes. The Resource Conservation and Recovery Act ("RCRA")[6] has increased the cost of disposal of many wastes. Unfortunately, waste oil presents an opportunity for unscrupulous collectors to mix other wastes with it such as PCB's and solvents. While the presence of such hazardous contaminants might be determined by sophisticated and time-consuming testing, visual inspection and testing procedures commonly used by collectors will not reveal the presence of such materials. Thus, surreptitious disposal practices have also increased the value of used oil. Restrictions on uncontrolled burning and enforcement efforts with respect to mixing would both decrease the price of waste oil and make re-refining a more viable investment.

Of the approximately two dozen bona fide re-refiners still in operation in the United States, the majority are very small companies. Many of these companies need to change to new processes and employ new technologies. The demands for capital necessary to finance improvements to, or expansion of, existing facilities, or construction of new plants are usually beyond the abilities of the re-refiner. For example, our company had processed lubricating oil through use of the acid-clay technology for a number of years. The residues of this process, acid-tar, are very acidic and require special handling and disposal. In 1978, our company was given no alternative but to discontinue acid-clay treatment. Disposal of the acid tar residues in a secure landfill would have increased the cost of our lubricants far beyond that of similar product produced from virgin crude. The solution to our problems was to build a new plant employing a new technology. We found that we could not raise capital by conventional means for more than approximately one-third of the cost of a new plant.

Our new plant and the company's future in the rerefining industry were made possible by a special guarantee program administered by the Small Business Administration for financing the construction of pollution control facilities.[7] To my knowledge, our financing was the first time this special guarantee program had been used in New York in its 4-year history.

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[6] P.L. 94-580, 42 U.S.C. §§ 6901 et seq.

[7] P.L. 94-305, 15 U.S.C. §§ 694 et seq.

In sum, I believe the law should continue to provide incentives for capital development and vehicles, such as the SBA program which we utilized. Such incentives not only promote modernization and expansion from within the industry but also attract investment and development from new entrants. It is my understanding that recent administrative changes in the special guarantee program have increased the costs of such borrowings and restricted its use to non-tax-exempt financings. If this were the case in October 1980, we could not have built our new plant and New York State would not have a re-refiner to recycle its waste oil.

It is ironic to me that another incentive for capital investment, the energy tax credit,[8] is not available for much of the equipment in a re-refinery. In general, recycling equipment qualifies for the energy tax credit.[9] However, due to a reference in the Internal Revenue Code regulations to another section of IRC regulations,[10] this credit is not available for equipment which recycles waste which has value as waste. As you know, used oil has value and therefore this tax incentive, supposedly available for energy conserving equipment, is unavailable for equipment which not only saves energy, but controls a pollution problem as well. This same rule prevents the financing of re-refinery plant construction to qualify for tax exempt status as a pollution control issue. I believe there is a solution for this inconsistency in the law and I will discuss it under the last topic of the agenda, Legal Factors.

Finally, the small size of most re-refiners precludes significant research and development work on a company level. The need for research to conserve petroleum and improve re-refining practices has been met in the past by the Bartlesville Energy Technology Center operated by the U.S. Department of Energy ("DOE") at Bartlesville, Okla. In addition to filling this vital need, Bartlesville has also administered a number of contracts for research of re-refining processess and disposal of residues from such operations. Currently, we are grantees of a DOE contract to provide data on the operation of our new plant. As stated before, our plant utilizes state-of-the-art technology. It is unique. The data which will be presented to DOE and then published will focus worldwide attention within the re-refining industry on our new process and new facility.

Recently, I have been advised that there is a possibility that all current DOE contracts could be terminated as part of the Federal budgetary process. In our case, this would mean more than one-half of our contract would remain unperformed. It would be a tremendous waste of opportunity to terminate this project and others before their completion. More specifically, it would be a complete waste of the dollars spent to date on this and other contracts that are terminated before completion. I urge you, not only because of my particular concern but because of the role the DOE has played in the re-refining industry, to continue both its contracts and its functions.

I also understand that research and development activities on re-refined oil conducted by the National Bureau of Standards ("NBS") may be terminated. For the last six years, BNS, under the mandate of the Energy Conservation Act of 1976 has been testing to determine the "substantial equivalence" between petroleum products derived from waste oil and virgin crude. Of course, this work is critical to removal of the bias against re-refined products as discussed above. Again, I urge you to continue this critical research.

ENVIRONMENTAL FACTORS

Since waste oil is a hazardous material and much of the 300 to 400 million gallons of waste oil which we fail to collect annually is poured down sewers, spread on land, or thrown in the garbage, the environment should benefit from greater collection efforts. At the same time, the significant increase in burning of waste oil as a fuel also poses a threat to the environment.

As discussed above, waste oil burned as a fuel is usually not subject to much treatment. These oils are burned when they contain heavy metals and other contaminants. Proponents of burning argue that pure crankcase wastes burned in a modified boiler or crankcase wastes blended with virgin fuels (e.g., no. 6 bunker oils) burned in a high efficiency boiler do not pose a threat to the environment. This argument ignores that some highly contaminated residue must be disposed of after the burning. More importantly, the proponents' arguments rest upon two assumptions:

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[8] Section 48(1), Internal Revenue Code of 1954, as amended ("IRC") 26 U.S.C. § 48(1).

[9] Section 48(1)(6), IRC.

[10] Treas. Reg. § 1.103-8(f)(2)(ii)(b).

1. That the waste oil is pure (non-mixed) crankcase or sufficiently diluted; and
2. That the boiler is efficient.

While some pilot programs may achieve these conditions, most burning probably takes place in inefficient boilers or utilizes contaminated crankcase waste. For example, small portable waste oil burners have gained popularity in recent years. Tests being conducted by EPA now indicate that these heaters are inefficient and contribute to pollution when operated. The possibility of receiving "pure" crankcase for burning grows more remote as the costs of disposing of hazardous wastes increase. As discussed above, PCB's and solvents may be mixed with waste oil to disguise the nature of the waste and turn a disposal cost (PCB's and solvents) into a salable product (waste oil). The generator of the waste oil may also fail to inform the collector of additional contaminants in its oil for the same reasons as the unscrupulous collector who mixes such wastes. In addition to the dilution of crankcase wastes with virgin fuel to minimize polluting emissions, some fuel vendors are now using waste oil to "extend" the virgin oil by blending. Of course, customers are not advised of the presence of waste in the virgin fuel oil and, thus, no attempt is even made to modify boilers and minimize pollutants.

The problem of uncontrolled burning—little or no boiler controls or quality controls on waste oil—can be addressed administratively and legislatively. On the administrative level, EPA has yet to promulgate RCRA regulations with respect to waste oil. If the regulations, when promulgated, list waste oil as a hazardous waste, uncontrolled burning will not be permitted. It is my understanding that EPA does not have the resources to bring this project to a timely conclusion. I urge you to press for results in this area.

It is also my understanding that the Clean Air Act will be subject to congressional review in the near future. Amendments to this act could regulate burning of waste oil because of the impact of this activity on the environment. Finally, OSHA provides both a statutory and administrative basis for regulating burning since the use of waste oil as fuel is common in industrial workplaces.

LEGAL FACTORS

Currently, there are impediments in the law to recovery in general and re-refining in particular. For example, the process for licensing our plant in New York State has taken more than 1½ years and is not yet complete. This process could be streamlined without compromising on the quality of governmental review of construction, engineering, and operating plans.

A second example of unnecessary obstacles to recovery is new legislation in Pennsylvania which requires registration of waste oil transporters.[11] Registration, of course, is a necessary procedure to monitor compliance with rules regarding disposal of waste. However, the Pennsylvania statute requires the transporter to post a collateralized bond in a minimum amount of $10,000 and maintain insurance in excess of $1,000,000. The rationale for the fully collateralized bond is that it represents a fund for emergency clean up of spills or other accidents. Close reading of the statute makes it clear that the collateral for the bond may be seized by the Commonwealth as a penalty for violation of the statute, regardless of the cost of spill clean up or the nature of the violation. This statute also demonstrates the problem faced by the re-refiner or small collector which does business across State borders, viz., a plethora of statutory and administrative controls, all supposedly directed at protecting the environment, but each setting out different requirements. Against this crazy-quilt of State rules, the re-refiners or collectors must also comply with Federal law and regulations (e.g., RCRA) which may result in inconsistencies (e.g., Federal Superfund legislation and Pennsylvania's statute described above).

Based upon all of my comments herein, I would recommend the following:

1. Promulgation of RCRA regulations with respect to waste oil, designating it a hazardous waste and controlling its disposition (re-refining; burning with strict controls).
2. Amendments to the Clean Air Act and the Occupational Safety and Health Act to control burning of waste oil, in general, and in the workplace, in particular.
3. Elimination of the requirement that waste must be valueless to qualify for the energy tax credit on recycling equipment and to qualify a pollution control bond as tax exempt.

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[11] Solid Waste Management Act, Public Law ——, No. 97 (1980).

4. Restoration of the SBA special guarantees program for financing of pollution control facilities to allow for guarantees in tax exempt issues and level amortization of loans.

5. Continuation of the DOE at Bartlesville, Okla. and current contracts.

Again, thank you for the opportunity to appear today. We need your support to eliminate the unfounded bias against re-refined products and maximize the energy conservation, resource recovery and pollution control which results from re-refining.

Mr. MOLINARI. Mr. Booth, after all we heard this morning, one would have to wonder why Booth Oil Co., Inc., had the courage, or whatever you want to call it, to construct a new plant with the capital construction costs being what they are, and with the uncertainties of being able to get your base product such as was described here today. Why did you do it?

Mr. BOOTH. Our source of supply is a little more secure because we have been in the business 60 years. We are very well established; we know our suppliers. We even had a situation where, because of some of our changes in processing, we have had to turn off some of the supplies on a temporary basis.

Mr. MOLINARI. Where do your supplies come from?

Mr. BOOTH. All over the State.

Mr. MOLINARI. Outside the State?

Mr. BOOTH. Some of it; most of it is from the State. We have gotten oil from industrial concerns in Ohio. We get some oil out of northern Pennsylvania, which is not too far from Buffalo. At one time we used to get oil out of Canada quite a bit. We have also gotten oil out of Michigan from industrial concerns.

If you differentiate, there is industrial and there is the crankcase refining. We handle both. The industrial one can go with larger trucks, and larger transport loads. Obviously, the radius of operations can be greater.

Mr. MOLINARI. Now, if you have this competitor out there, this ugly guy we have heard about——

Mr. BOOTH. They are not all ugly.

Mr. MOLINARI. No, but there are some who are very ugly, who because they have PCB's and other contaminants that they are trying to get rid of, they can well afford to pay more than you, a legitimate re-refiner wouldn't that interfere with at least some of your source of supply?

Mr. BOOTH. It does, most definitely.

Mr. MOLINARI. Could you describe how that has affected you?

Mr. BOOTH. Price mostly.

Mr. MOLINARI. To what degree percentagewise?

Mr. BOOTH. I would say in the last 3 years the price has tripled.

Mr. MOLINARI. My God. So that you are getting it——

Mr. BOOTH. In the last 8 years the price has gone up maybe 8 to 10 times.

Mr. MOLINARI. I would expect there are other factors that increased that price other than these no do-gooders.

Mr. BOOTH. Well, the re-refiners have raised the price because they have had to compete with the fuel people. It is a never-ending competitive bid for that source of supply.

Mr. MOLINARI. But you personally have witnessed this competition from sources we have heard described?

Mr. BOOTH. Oh, very much so.

Mr. **Molinari**. You are still able to buy from the same suppliers, the only difference is it has increased your costs. Is that the net result or have you lost suppliers as well?

Mr. **Booth**. Oh, we have lost suppliers. We have gotten new suppliers. Oftentimes there are two sides to the business. One is selling the finished product, another is buying the source of supply. They both require a lot of work and effort to keep both sides happy. It is one case where you definitely have to go out of your way to be nice to your supplier.

Mr. **Molinari**. One of the earlier witnesses made a statement to the effect that the re-refining process still will not remove all the contaminants that might be located in the waste oil product. Would you mind commenting?

Mr. **Booth**. Proper re-refining techniques will remove all the contaminants from the finished product that is being sold as lubricating oil. Obviously, to remove them, they have to be made into another form. They are concentrated in the bottoms in our case, utilizing high vacuum distillation technology. Under controlled situations they can be burned. The bottoms have also been utilized very successfully in the Midwest as asphalt extenders.

The Department of Energy did a study there with the Asphalt Institute indicating that the distillation bottoms from re-refining actually have some very positive characteristics in their use as asphalts. So with that particular type of technology today, the bottoms actually take on a positive value as opposed to a negative value.

Mr. **Molinari**. Would you mind briefly describing what controls you have for testing the product that you are bringing into your plant?

Mr. **Booth**. Our main——

Mr. **Molinari**. Do you test it at the source?

Mr. **Booth**. It would be economically prohibitive to test every load that comes in. Two factors affect that: Both the cost and the time. When a collector is sitting with his truck, there are certain rudimentary tests that can be run on a very brief basis. There is one to test for water and dirt. I think the main thing a re-refiner relies on is knowing his suppliers, working with his suppliers, doing periodic testing of a new supplier to determine his "reliability."

It may sound like a very simple test, but it is sometimes the only one a re-refiner, or even a legitimate fuel processor—I will include them in this—that just plain smelling a product can give you quite an indication as to what type of possible hazardous constituents could be in there: solvents and gasoline.

Mr. **Molinari**. I am told even by feeling the product you can tell.

Mr. **Booth**. I am not sure about that. Perhaps you could feel whether there was metal or dirt, a lot of grit in it. But just visual testing, smelling, also the basic tests such as trash, water, and dirt, testing for PCB's, samples are taken periodically. Those have a turnaround of, at best, several days. If you have your own lab facilities, some of the larger operations are putting in their own—we eventually will—the turnaround there is several days.

Equipment to do that in-house could be upwards of $50,000 to $75,000 just for the equipment, as well as a trained technician full-time to operate it. So there are certainly some difficulties. There is also one other issue, interestingly enough. There is no standard test for PCB's.

Mr. **Molinari**. Is there a difference in the cost of re-refining to you, depending upon the amount or types of contaminants that might be in the product?

Mr. **Booth**. Yes.

Mr. **Molinari**. Can it be substantial?

Mr. **Booth**. It definitely can be. As I said earlier, we are like a total waste oil treatment plant. We handle oily water wastes, with very little oil. There we would charge our customer and dispose of it, and treat it, and recover what little oil there is and dispose of the water into the sewer authority. We will handle everything up to high-quality industrial lubricants that have very little contamination. We will pay higher prices for those.

Mr. **Molinari**. Mr. Rosenberg, our majority counsel, has a couple of questions he would like to ask on behalf of Mr. Bedell.

Mr. **Rosenberg**. Thank you, Mr. Molinari.

Mr. Berkowitz, you had entered some material into the record here regarding waste oil burners. Just to clarify that, these are primarily intended for industrial use where a plant is generating its own waste lubricants, and then burns them onsite? Is that what we are talking about?

Mr. **Berkowitz**. Yes; it can also be used in a home. There is nothing to prevent the unit physically. It is small enough to put into a home and incorporate into an existing heating system.

Mr. **Rosenberg**. These products are marketed for home residential use?

Mr. **Berkowitz**. Every trade publication has an advertisement. These are flyers. Some are pullouts. But you can't pick up a trade publication today, no matter what industry, and not find it. What is to stop these people also from utilizing them—these boilers—for burning of solvents?

Mr. **Rosenberg**. I take it from your testimony you think this is not a desirable development.

Mr. **Berkowitz**. It has radically affected the amount of products available to be re-refined or processed and used as a fuel, with all the toxic matter removed from it.

Mr. **Rosenberg**. You have nicely led to my next question, which is to Mr. Booth. We have had some discussion previously that currently the amount of waste oil that is being recycled into, if you will, new lubricant, is about 100 million gallons a year, and the testimony that other witnesses gave is that there is potentially another 300 to 400 million gallons that could be recovered in that way.

Now that would presume that a fairly substantial investment in additional re-refining capacity would have to be made, as I see it. Is that correct?

Mr. **Booth**. Yes; your number, 300 to 400 million gallons, was do-it-yourself-type oil not currently available at all. Certainly the availability of used oil in the United States approaches 1.5 billion gallons. Presumably it all could be recycled, theoretically.

Mr. **Rosenberg**. There would be a multiple effect there.

Mr. Booth. To answer your question, the point we have often made both as a company and as the association is that in a sound environmental and economic situation any industry will attract investment, whether it be to special guarantees or venture capital. Right now the only sources where most re-refiners have been able to get money is industrial revenue bonds and pollution guarantee issues and areas like that because the other sources of capital don't see—I will use the word environment—the competitive environment as being that good for the re-refiner.

Mr. Rosenberg. So that without the industrial revenue bonds, without SBA financing, the new facilities that would be needed to reprocess the waste oil might possibly not be built. Is that correct?

Mr. Booth. I am saying that. I am also saying that beyond that, if there were controls on burning, at least more controls, and more enforcement of existing laws, that you could change the competitive climate such that outside private investment money could start coming into the industry.

Mr. Rosenberg. That is my final question here really. You testified that there has been substantial delay in the development of regulations at the Federal level. But I think Congress recognized that delay in 1978 when it passed the Resource Conservation Recovery Act and mandated EPA to develop regulations, which we are still waiting for. Is there likely to be investment in additional new re-refining capacity with the knowledge that EPA may at any time promulgate regulations that require a plant to be something other than what you are building, and that those regs aren't out yet?

Mr. Booth. I am not sure I follow you.

Mr. Rosenberg. Is the private sector likely to put much more money into building new plants that might be affected by the regulations, knowing the regulations are coming, but not knowing what they are?

Mr. Booth. Well, regulations have a double-edged sword is what you are saying. They can also affect the people doing the re-refining as well as help them. That is what you are saying in effect. We have built our plant according to New York State regulations, which you have heard they had proposed rules governing the construction. So we pretty much followed those, which are tighter than what EPA will eventually come out with, we are reasonably sure of that. I think you would find more people getting into the field if they felt that the regulations encouraged re-refining.

Mr. Rosenberg. Are they waiting to see what those regulations will be?

Mr. Booth. I know many people who are waiting to see what they are.

Mr. Rosenberg. So the delay in regulations has delayed new construction?

Mr. Booth. Certainly it has. If there were more controls on the burning of used oil as a fuel, I would guarantee that there would be more construction of re-refineries in the United States.

Mr. Molinari. Would that not lead possibly, though, to the loss of that resource to some extent, if you restrict the burning? You are saying by restricting the burning you are going to have more people in re-refining?

Mr. BOOTH. It would increase the source of supply; namely, used oil feedstocks for the re-refiner. It would give him a more stable source of supply, give him a lower price of supply and certainly encourage re-refining of the product.

Mr. MOLINARI. I am concerned as to the impact on the availability to use the resource, the waste oil itself.

Mr. BOOTH. It would have to be gradually phased in. We have in testimony that the association has given to EPA, written statements on their report to Congress from the Used Oil Recycling Act of 1980, to which I believe you were referring. We propose a 5-year phase-in of a restricted type burning. The association specifically does not say that all burning should be ended. They are saying that a sensible phased-in approach, looking at gradual controls so that the uncontrolled, indiscriminate burning and mixing of waste oils with other wastes, that that would, in fact, be a major encouragement to the re-refining industry.

Mr. MOLINARI. My question still remains. That is a phasein of 5 years; does that not also equate to a phaseout for other industry that would be presently——

Mr. BOOTH. The fuel oil process industry? It would certainly put some of them out of business. Some of the ones that are perhaps guilty of the surreptitious mixing——

Mr. MOLINARI. How about some that are not guilty? Would it not be hurting them, as well?

Mr. BOOTH. I believe that if they had built up a legitimate fuel oil business, burning it in the proper type boiler—the fact is we are in the fuel business right now. So I can speak from a bit of knowledge over the last several years. We have turned to selling our product as fuel to stay alive until we can get the new plant on stream. We have sold our fuel to large users. I won't say names. But we have sold to stone plants where the ash goes as part of the clinker. We have always given the customer's specifications, told them what product they were getting and did the testing that was necessary, or they did the testing. Those kinds of people will continue to stay in business.

Mr. MOLINARI. I want to move this along because I know we are running behind, and there are scheduled witnesses to go. Those of you who want to testify who are not scheduled, I will remain and be glad to hear your testimony. Those who are scheduled, out of courtesy to them, I would like to get them on.

Mr. Berkowitz, I think you made a statement, that when comparing waste oil with residual oil, that compares at least equally to it.

Mr. BERKOWITZ. Yes, I did. I also stated that after all the contaminants had been removed.

Mr. MOLINARI. How about sulfur, you are including that in that general picture?

Mr. BERKOWITZ. Sulfur, except for very high quality cutting oils, is not existant. It is only when sulfur is used in cutting oils. That is one of the primary lubricants in the product. But when you talk about contaminants, please do understand that some of the contaminants are advantageous that are inherent in waste crankcase oils and, of the nature.

I think Mr. Bedell made a comment of heavy metals. A very general term. One of the heavy metals we look for is magnesium; that is a combustion catalyst. Many of the additives in the additive package in lubricating oils are in fact combustion catalysts. So, that they aid in the combustion and don't take away from it. Many of the recycled, re-refined, however you phrase it, perform equal to or in some cases, better than, regardless of their available Btu. Don't let the available Btu of a product be the determining factor, because can you utilize all those Btu's? How efficiently can you? My findings, backed up by agencies and Brookhaven, in the area of solvent burning as an alternate fuel mixed with oils performed equal to and, in some cases, better than because they act as a combustion catalyst.

Mr. MOLINARI. Do either of you know what LILCO does with its waste oil products?

Mr. BERKOWITZ. I don't have counsel here, so I am going to refrain from answering that.

Mr. MOLINARI. All right. Mr. Berkowitz—I will be pursuing that one myself. I had a question I am sure we could answer; maybe you would know offhand. In New York City, let's take the transit authority. Tremendous amounts of waste oil. Does anybody know what happens to that?

Mr. BERKOWITZ. Yes. It is picked up by licensed collectors. These collectors are, and I am going to underline "supposed" to bring it to permitted facilities, which in turn will clean it up and distribute it to the marketplace in which they congregate.

If you go back to my testimony earlier, I said control of the collection is really where the emphasis should be placed. These collectors unscrupulously from time to time will sell the raw unfinished product to be used as alternate fuel. This is where the problem is, not at the facility. It surprises me how much emphasis is placed on the permitting process and the costs by these facilities that they have to bear for engineering fees, attorneys fees, so on, yet the collector is hardly even scrutinized.

All the financial and legal responsibilities are placed on the facility, the collector in turn has nothing, no financial responsibility to speak of. Yet that is where the problems really set in. Look towards the collectors, not at the facilities. The facilities have an investment. What do the collectors have?

Mr. MOLINARI. So if we were to examine the waste oil produced by the transit authority, we would find perhaps some questionable circumstances in the disposal of that? You are suggesting those who are recipients might not stand scrutiny?

Mr. BERKOWITZ. No, because if you used the transit authority as a typical example, the contaminants in that are basically free, just some blowby. They use diesel engines, so you are not talking about lead for the most part. You are not talking about any toxic material.

Mr. MOLINARI. I understand; it may be relatively clean when it leaves there but it may not be clean later on, that is my concern.

Mr. BERKOWITZ. Congressman, with all due respect, let's say on a hypothetical basis that all used waste oils go to re-refiners. What will stop these individuals who are dumping now toxic material into waste oil to just dump it into the virgin fuel oils? What is to stop them? You have to control collection.

Mr. **Molinari**. My last question is, how do you do that? It sounds like such an easy thing but how do you really do that? How do you regulate the control of collections?

Mr. **Berkowitz**. I don't have an instant answer. I am certain the various associations we represent would be more than glad to spend time. I can't give you a 1-minute answer to a very serious problem.

Mr. **Molinari**. Would you mind taking it back to your association and furnishing the subcommittee with your recommendations on what controls might be implemented? We would be very interested in receiving that information.

Mr. **Berkowitz**. I would be more than glad to give you a detailed indepth letter to that effect.[7]

Mr. **Molinari**. I thank you both very much for the comprehensive and very interesting testimony.

Mr. **Booth**. Thank you.

Mr. **Berkowitz**. Thank you.

Mr. **Molinari**. Next we call Ralph Bombardiere, I think would be the pronunciation.

Counsel calls to my attention we owe you a big thank you because you were number one on the list and you have gone all the way down to the bottom. You represent the New York Association of Service Station Associations.

TESTIMONY OF RALPH BOMBARDIERE, EXECUTIVE DIRECTOR, NEW YORK STATE ASSOCIATION OF SERVICE STATIONS, INC.

Mr. **Bombardiere**. Yes, sir, and we are used to coming last.

Congressman Molinari and members of the subcommittee, thank you for inviting me to testify before this group. My name is Ralph Bombardiere. I am the executive director of the New York State Association of Service Stations, representing 5,000 service station dealers in New York State.

I will be addressing my remarks, of course, to the waste oil generated by automobiles. The issue of waste oil has always been a topic of interest and concern for my industry. The waste oil market has seesawed up and down for a number of years. As far back as 20 years ago, I can remember receiving 2 to 3 cents a gallon for waste oil and at times I had to pay the same amount to have it picked up.

Most collectors in New York State are small one-man operations who sell their product to one of the big ones. Those big ones are Southgate in Buffalo, Elmira, Syracuse, and Albany, and Booth in western New York, and northeast which I understand has recently been using other names throughout the State.

Ideally, a collector spends up to 10 cents per gallon on street costs—truck, driver, storage—and another 4 to 8 cents per gallon on transportation. He may supplement his profit, if there is any, by charging $25 to $50 for pickups where water is present or if the pickup is troublesome. The economics of the collecting business almost mandates questionable practices. He often, for example, has his gross cut by the re-refiner who makes an arbitrary and high B.

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[7] The subcommittee had received no further information as of the time this record went to press.

S. & W.—basic sediment and water—deduction which is difficult to refute.

In recent years there has been a greater demand for waste oil and consequently the prices have risen. The market for waste oil is at best considerably unstable. The price paid to our service station dealers in New York State can range from 5 cents to 25 cents per gallon. However, generally 15 cents is a realistic figure. The prices can vary by geographic location, amount of waste oil available at pickup location, and distance from pickup point to where the oil is to be delivered.

New York State has a law that requires service stations to accept waste oil from the public. My industry, of course, objected to the regulation on the basis that it was unfair to require us to accept waste oil from a motorist who purchased his or her oil elsewhere. At one point, we were even prepared to take legal action on the ground that the law was unconstitutional. It became evident very quickly that the law was not going to do what it was intended to do. The do-it-yourself home mechanics did not bring the oil to the service station for disposal in any measurable numbers. In fact, the law has done very little to encourage the home mechanics to dispose of waste oil by any other means than they have done in the past, and that is in an environmentally unsatisfactory manner.

As the price of waste oil increased in some areas of New York State, we set up collection points as a service to the consumer and a source of profit for the dealers. These took the form of barrel receptacles. This program was unsuccessful. In one area a dealer advertised in a pennysaver newspaper that he would pay 5 cents a gallon for waste oil. Again, the results were negligible.

A legislative study suggests that New York State generates about 55 million gallons of waste oil per year, and that about 40 percent of that is disposed of improperly. An Albany County study suggests that the State figure is more likely 60 million gallons and that 30 percent of it is disposed of in a manner harmful to the environment. There is no question that an alarming quantity of lead-laden oil is regularly dumped on the land surface where all of it eventually finds its way to water.

There are several significant reasons why waste oil is not being recycled to any great degree. It has been found that waste oil can be used as a heating fuel in its raw state. Many businesses have installed waste oil heaters that are relatively inexpensive and efficient. For example Skidmore College heats a majority of its complex with raw waste oil. The maple syrup industry uses waste oil in its processing of maple syrup. At a recent meeting held by New York State Senator Cook, the maple syrup industry protested the regulations placed upon the collectors and blamed these restrictions for their problem in obtaining waste oil.

Of course, the assumption was incorrect. These problems lie in the increased demand for waste oil. The milk industry is probably the largest user of waste oil in New York State. They use it in their boilers to generate heat in the pasteurization process.

Waste oil is also used extensively by road oilers during the summer. This illegal practice probably generates the largest degree of profit to the collector.

The amount of waste oil generated by the do-it-yourself mechanic is a significant amount. The best estimate available is that approximately 50 percent of the passenger car engine oil sold is to the motorist that changes his or her own oil, or approximately 190 million gallons per year of waste oil is generated by the do-it-yourselfers. Used oil has high energy value and should be recycled. It can be rerefined into good lubricating oil, or used as a feedstock in the manufacturing of other products. Additionally, it can be reclaimed or reprocessed to clean fuel oil or blended with heavy fuel oil and burned safely.

However, the motivation to recycle waste oil will be determined by several circumstances: One, if the price of heating fuel continues to rise, the use of waste oil as a heating fuel will continue to become more and more attractive; two, if the proper agency or Department of Environmental Conservation does not enforce the prohibition against road oiling, this practice will continue; and three, if the home mechanics are allowed to continue to dump waste oil in an improper manner, the recovery percentage of waste oil will continue to decline.

Two of the aforementioned practices can certainly be dealt with: The proper agency—DEC—must be made to enforce the prohibition against road oiling. A method must be found to curtail the illegal dumping of waste oil by the do-it-yourselfers.

Waste oil is becoming more and more valuable and a program of educating the public may be the method of encouraging the home mechanic to dispose of waste oil at a proper collection center, and at 25 cents a gallon I assure you we will find many service stations who will be willing to accept waste oil on a voluntary basis.

Thank you.

Mr. MOLINARI. I would like to introduce into the record a study made by the Department of Energy on do-it-yourself oil changes, dated July 1981.[8]

We have heard so much today about the do-it-yourselfers and the tremendous quantity of this valuable resource that is not only being wasted, but also contaminating the environment. Hearing the estimates of the figures, as a Member of Congress, I wonder what we can do that we are not doing now in order to encourage the recovery of this valuable resource. Now we have heard Muscular Dystrophy is going to embark on this program. It would be interesting to see the reaction of the public to a cause such as that. It might engender more cooperation on the part of the people at home to bring the oil they have changed to a collection point.

But, since you represent 5,000 service station dealers, I think you are probably in a better position than anybody else that was in this room today to tell us what could be done to induce these folks that are responsible for 50 percent of the oil changes to bring that waste oil into a collector? Do you have any ideas?

Mr. BOMBARDIERE. You ask a difficult question. Practically speaking when you change your oil you get a large container, you drop oil into a container under the car. Then you have to take it, funnel it into a gallon and take it over; it is a messy process. It's much easier to take it someplace, dump it, and forget about it.

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[8] See app. E.

We have tried in some places to encourage people to bring the waste oil to our locations. We have had our barrels very nicely colored and requested they just come on down, and drop it in. No problem; I think the answer might lie in the industry itself, because the economics of it might make it feasible for the people to come. The price of waste oil is going higher and higher all the time. As more and more people burn it, that is an economic saving. Heating oil is $1.16 to $1.20 a gallon. The maximum we can get for it selling it to a collector is 25 cents. We could probably attract more people if our price to the consumer was higher. If we could say to the consumer we will give you 20 cents a gallon, that becomes more attractive than 5 cents a gallon, or zero per gallon.

I do not think there is enough, I do not think anyone in the State really knows if there is a law on the books which says you can bring it to a service station and he has to take it. You might be afraid he would make you wear it. But our industry, right now, is well educated to the fact that we must accept this waste oil. I think our people would only be too glad to get it at this point. I really think a public information program would do wonders.

Mr. **Molinari**. I think that is the key, in my own judgment. I have seen surveys indicating the great concern in the Nation about the environment, much more than ever before. I truly believe the public can be educated, if it could be undertaken on a proper scale, to inform the public as to what it is doing, No. 1, that violates the law, but No. 2, more importantly, that it could contribute to the solution of a very serious national problem. Everybody has seen the commercials with the ayatolla.

ConEd has some very imaginative commercials where they show the Shiites with chains and how we are held hostage. If the average citizen is told even to some small degree he is going to help the national effort in this country by taking this waste oil to a local service station operator, I think he will get at least some of them to respond. I think that we have some kits here that show experimental programs. You know, one of the States, I think it is Pennsylvania, or North Carolina, one of the States has a program—it is North Carolina—where they take the waste oil generated only by the State departments and bring it in to reprocess it, and then use it again. They can't go outside, because there is a law against competing with private businesses. But it works and apparently quite successfully. We were expecting a representative from the State of Pennsylvania, a Senator I believe it was, who was going to tell about a program which he embarked on which apparently is meeting with some success. So, I say to you representing these 5,000 service station dealers throughout the State that we would be very interested in seeing what kind of a program we could work out. Maybe it is going to be trial and error. It may not work. Obviously some of these projects have not worked in the past. That does not mean we can't come up on one in the future that might work.

Mr. **Bombardiere**. I think I can assure you, Congressman, that although the New York State Association represents 5,000 service stations, we are a member of the SSDA which is the national association which has representation in well over 40 States. We would only be too happy to participate in any program of collecting of waste oil.

Mr. **Molinari.** One comment I would like to consider. This question about your industry believing it unfair to require you to accept waste oil because it is bought someplace else. Well, the guy objecting to that has to understand that oil that has been bought from his place may be dropped off at some other service station too. Wouldn't it really even out in the long run?

Mr. **Bombardiere.** No, I do not think so. I think you are talking about the way the oil is bought in discount houses at discount prices such as at Sears, Roebuck, the K-Mart and so on. We liken it to doing your own tax return and then requiring by law an accountant to check it for you for nothing. It just does not seem fair. The economics of it now have made it feasible that we would love to collect your oil; bring all you can; we love taking it now, sure.

Mr. **Molinari.** I want to thank you very much. We have enjoyed your testimony and thank you so much for waiting.

Speaking of waiting, Jim Marshall, you have been waiting here a long time, Jim. I am very sorry. We had felt, we were hoping Mr. Bedell would still be here. Anticipating the type of testimony, we felt you might be a good witness to wrap it up and talk about the Federal aspect of it.

Do you have extra copies with you?

TESTIMONY OF JAMES R. MARSHALL, DIRECTOR, OFFICE OF PUBLIC AFFAIRS, ENVIRONMENTAL PROTECTION AGENCY, REGION II

Mr. **Marshall.** I do, yes. I have two statements, Mr. Molinari. One is our own regional statement. The other was prepared by the Office of Solid Waste at our headquarters.

Here are some extra copies.

Mr. **Molinari.** I might just state that the gentleman has been very cooperative with me over the years, when I was a State legislator as a matter of fact.

On many occasions I called him and found his advice to be very useful. I look forward to your testimony.

Mr. **Marshall.** Thank you. I remember that very well myself. As I said I have two statements, Mr. Congressman. One which we have given to the clerk records the activities of our headquarters Office of Solid Waste and our Office of Research and Development to carry out the terms of the Used Oil Recovery Act. The second one describes the kind of activities that we go on with at the regional level of the EPA. I would like to just run through that. I will try to condense it as I go.

Mr. **Molinari.** Can you hold on just a second, Jim? It seems like I have one statement; do you have a statement on solid waste also? I think we have all gotten a copy of the one statement, Jim.

Mr. **Marshall.** I think I gave you two of each, didn't I?

Mr. **Rosenberg.** No. Just solid waste.

Mr. **Marshall.** All right. You are about to get some more.

Mr. **Molinari.** Proceed.

Mr. **Marshall.** I will just submit the one for the record. I will read mine and be happy to try to answer questions on both of them.

Mr. MOLINARI. The statement of the Office of Solid Waste will be introduced into the record. Thank you.

Mr. MARSHALL. I should note I am representing Dr. Richard T. Dewling, our acting regional administrator. I am director of public affairs for the region II office of EPA. I also serve as Dr. Dewling's chief of staff.

Nationally, about 55 percent of waste oils are burned as fuel. But recent estimates we have heard from the States of New York and New Jersey indicate that waste oil recycling accounts for less than 1 percent of heating fuel used in each State. Based on our present knowledge of the waste oil situation, we believe most waste oil can be burned without environmental harm, but certain waste oil use practices concern us.

We are concerned that indiscriminate distribution and use of contaminated fuel oil, particularly waste oil, adulterated with other hazardous wastes could be a potential health problem. We are, therefore, taking several specific actions at the Federal level to deal with the problem of contaminated waste oils.

Another thing we feel, and I think it has been demonstrated by the testimony this morning, the nature of this potential problem also calls for coordinated activity among all levels of government. EPA has been working closely with our State and local counterparts on enforcement efforts and to develop further strategies for dealing with the problem.

EPA has primary enforcement jurisdiction for regulations under the Toxic Substances Control Act [TSCA]. These regulations, among other things, place stringent restrictions on the combustion of materials including waste oils containing polychlorinated biphenyls [PCB's] in excess of 50 parts per million. It is illegal to burn materials containing greater than 50 parts per million of PCB's except in a permitted incinerator that has demonstrated by test its ability to destroy PCB's.

In addition to that, high efficiency boilers are allowed to burn materials containing PCB if concentrations do not exceed 500 parts per million. The source must notify EPA that it will meet certain boiler and performance specifications expressed in the regulations. Another aspect of the regulation makes it illegal to blend oil contaminated by PCB's to reduce concentrations.

In region II, EPA inspectors are enforcing these regulations. TSCA inspectors are alerted to waste oil receiving sites by means of TSCA and RCRA inspection programs, referrals from State agencies, and other referrals. Nineteen inspections of such sites have been conducted since the program started. TSCA investigative reports concerning waste oil handlers have resulted in a number of facilities being cited for violations: Nine enforcement actions have been initiated and two are pending. While the major thrust of the inspection program is to control PCB's at the source, approximately 10 percent of the TSCA inspection program in region II, about 12 inspections per year, is devoted to waste oil handlers.

The Clean Air Act provides for regulatory control of criteria pollutants, including sulfur oxides and lead, which result when waste oils are used as fuels, to insure that national ambient air quality standards [NAAQS] are met and maintained. The States have primary enforcement jurisdiction for the control of criteria pollutants in accordance with regulations established by State Implementation Plans [SIP]. These plans are approved by EPA, and Federal enforcement action can be brought to bear. Also, where appropriate, a State can delegate enforcement authority in certain instances to local agencies such as the New York City Department of Environmental Protection [DEP].

With respect to sulfur oxide emissions, the city DEP has dealt with the problem by limiting the maximum sulfur content of fuels. We have already heard a description of how they monitor the use and distribution of these fuels. With respect to lead, the New York State Department of Environmental Conservation is developing a State implementation plan which will impose regulatory strategies for insuring the achievement and maintenance of these standards.

We expect to receive this SIP for review in the near future. The DEC has adopted an interim policy requiring the permitting of sources with a potential for emitting lead.

Most waste oils are not now defined as a hazardous waste under the Resource Conservation and Recovery Act [RCRA]. Indeed, RCRA encourages the combustion of waste oils for the purpose of energy recovery and exempts the user from any permitting requirements. The exemption also applies to those who burn such a fuel for heating purposes and to blending and storage facilities.

However, whenever other hazardous waste is mixed with waste oil, that mixture is subject to RCRA transportation and storage requirements.

Under our RCRA hazardous waste enforcement program, EPA region II has conducted truck stopping programs in concert with other Federal agencies and State and local policy, transportation, and environmental agencies to check whether hazardous waste transporters are meeting RCRA requirements.

While not aimed specifically at waste oil transporters, this kind of effort does, I believe, have a deterrent effect on those who would be attempting to move contaminated waste oil across State lines.

One of the earlier witnesses stated it is very difficult to conduct a truck stopping and inspection program because of the amazingly rapid communication system that exists among truck drivers. This was certainly the experience we had with our program. We stopped more than 4,000 trucks at bridge and tunnel crossings in the metropolitan area and found very few violations.

So, we are confident that the grapevine worked very well in that case. In another one of our major efforts at enforcement in the hazardous waste area, EPA region II has provided Federal funding as seed money to begin hazardous waste strike forces in the States of New Jersey and New York. In July 1979, an initial grant of $500,000 was given to the State of New Jersey to coordinate the hazardous waste enforcement activities of the State's division of criminal justice, division of law, division of State police, and department of environmental protection with those of the U.S. Attorney and EPA. A subsequent grant of $150,000 continued the State's effort which is now being funded from State resources, as Mr. Tyler discussed earlier.

Similarly, an initial grant of $686,000 was made to the New York State Department of Environmental Conservation in the fall of 1979 to establish a Mid-Hudson Hazardous Waste Strike Force, followed by a subsequent grant of $150,000 in the fall of 1981. Plans are now underway for the State to assume full funding for the strike force.

Designed to coordinate the activities of the many agencies involved in dealing with hazardous waste enforcement in the States, the strike forces emphasize the criminal enforcement aspects of illegal hazardous waste disposal activities and have provided training in various aspects of hazardous waste law enforcement techniques to State and local criminal justice personnel.

The strike forces have proven to be a viable mechanism for uncovering violations of hazardous waste regulations. Numerous indictments have been handed down against violators in each State as a result of the strike forces efforts, and several convictions and guilty pleas have been obtained in both States. Some of the strike force cases have involved waste oil handlers who are illegally disposing of hazardous wastes.

As noted, the combustion of waste oils for energy recovery is not currently regulated under RCRA and in fact under properly controlled conditions, burning is a preferred method of disposing of some types of hazardous wastes. However, the Used Oil Recycling Act of 1980 directs EPA to establish regulations necessary to protect human health and the environment from the potential hazards associated with waste oil. It will be several months before the Agency completes its analyses and is ready to propose any waste oil regulations. At this point, we have two major concerns regarding the burning of waste oil: First, we want to protect the public at large from indiscriminate burning of contaminated waste oils under uncontrolled conditions. Second, we want to encourage the recovery and reuse of unadulterated waste oils either as heating fuel or in some other beneficial configuration. EPA is now evaluating alternative regulatory strategies for waste oil in order to determine the need for and extent of regulations to meet both of these goals.

EPA will be relying on a Department of Energy study now underway as well as our own testing program to determine hazardous waste combustion characteristics and byproducts. The DOE testing involves collection of actual waste oil samples from collectors, reprocessors, and re-refiners and analysis of the constituents of the samples collected to determine whether toxic contaminants are present and what they are. The waste oil samples will be burned in different kinds of boilers and space heaters and put through tests simulating other uses and disposal methods such as road oiling, disposal into sewage treatment systems, and re-refining reprocessing to see what actually happens to the contaminants.

EPA is carrying on a program to test the efficiencies of different kinds of industrial boilers for burning various toxic substances. Another program involves testing of incinerators already in operation. A third study to determine the products of incomplete combustion at different temperatures and times is underway at the University of Dayton. We expect that these testing programs will give us the data and information we need to develop a reasonable regulatory scheme for waste oils that sets standards tailored to the waste oils problem to address the specific health and environmental risks posed by this waste stream.

Both New York and New Jersey are listing waste oils as hazardous wastes in their States' hazardous waste management programs and will, I understand, be using the same kind of standard setting approach that EPA is developing. In conclusion, we share the concerns of this subcommittee with respect to the distribution and use of contaminated waste oils. The problem is receiving the attention of EPA and State and local regulatory agencies.

EPA region II recently hosted a meeting on the subject of contaminated waste oils with representatives from the States of New York and New Jersey, and from New York City. At that meeting, information on the various aspects of each agency's actions on waste oils were discussed, and efforts to coordinate standard setting activities, enforcement strategies, and other information exchanges were begun.

We are hopeful that these meetings will continue in the future and that other EPA regions and neighboring States such as Connecticut and Pennsylvania will be joining us so that the network designed to deal with contaminated waste oil problems is expanded.

This concludes my prepared statement, Mr. Chairman. We appreciate this opportunity to discuss the sale and use of waste oil as heating fuel with you and will be happy to answer any questions you may have.

[The full prepared statement of Dr. Dewling follows:]

PREPARED STATEMENT OF DR. RICHARD T. DEWLING, PH. D, ACTING REGIONAL ADMINISTRATOR, REGION 2, U.S. ENVIRONMENTAL PROTECTION AGENCY

Good morning, Mr. Chairman, my name is James Marshall. I am the Director of Public Affairs for the Environmental Protection Agency in region 2. I am here today to address the Subcommittee on behalf of Dr. Richard Dewling, our Acting Regional Administrator, on the sale and use of waste oil as heating fuel.

SCOPE OF THE PROBLEM

Nationally, about 55 percent of waste oils are burned as fuel. But recent estimates we have heard from the States of New York and New Jersey indicate that waste oil recycling accounts for less than one percent of heating fuel used in each state. Based on our present knowledge of the waste oil situation, we believe most waste oil can be burned without environmental harm, but certain waste oil use practices concern us.

We are concerned that indiscriminate distribution and use of contaminated fuel oil, particularly waste oil adulterated with other hazardous wastes could be a potential health problem. We are, therefore, taking several specific actions at the Federal level to deal with the problem of contaminated waste oils.

The nature of this potential problem also calls for coordinated activity among all levels of government. EPA has been working closely with our State and local counterparts on enforcement efforts and to develop further strategies for dealing with the problem. My testimony today focuses first on existing enforcement efforts and secondly, on our development of regulations governing the uses of waste oils.

FEDERAL ENFORCEMENT EFFORTS

EPA has primary enforcement jurisdiction for regulations under the Toxic Substances Control Act (TSCA). These regulations, among other things, place stringent restrictions on the combustion of materials including waste oils containing polychlorinated biphenyls (PCB) in excess of 50 parts per million (ppm). It is illegal to burn materials containing greater than 50 ppm of PCBs except in a permitted incinerator that has demonstrated by test its ability to destroy PCBs. Also, high efficiency boilers are allowed to burn materials containing PCB if concentrations do not exceed 500 ppm. The source must notify EPA that it will meet certain boiler and performance specifications expressed in the regulations. Another aspect of the regulation makes it illegal to blend oil contaminated by PCBs to reduce concentrations.

EPA is enforcing TSCA regulations in Region II. TSCA inspectors are alerted to waste oil receiving sites by means of TSCA and RCRA inspection programs, referrals from state agencies, and other referrals. Nineteen inspections of such sites have been conducted since the program started. TSCA investigative reports concerning waste oil handlers have resulted in a number of facilities being cited for violations: 9 enforcement actions have been initiated and 2 are pending. While the major thrust of the inspection program is to control PCBs at the source, approximately ten percent of the TSCA inspection program in Region II, about 12 inspections per year, is devoted to waste oil handlers.

INTERGOVERNMENTAL ENFORCEMENT EFFORTS

The Clean Air Act provides for regulatory control of criteria pollutants, including sulfur oxides and lead, which result when waste oils are used as fuels, to ensure that National Ambient Air Quality Standards (NAAQS) are met and maintained. The States have primary enforcement jurisdiction for the control of criteria pollutants in accordance with regulations established by State Implementation Plans (SIP). These plans are approved by EPA, and federal enforcement action can be brought to bear. Also, where appropriate, a state can delegate enforcement authority in certain instances to local agencies such as the New York City Department of Environmental Protection (DEP).

With respect to sulfur oxide emissions, the City DEP has dealt with the problem by limiting the maximum sulfur content of fuels. The City is establishing a task force, we understand, to monitor the use and distribution of waste oils and implement necessary enforcement actions under the Clean Air Act.

With respect to lead, the New York State Department of Environmental Conservation (DEC) is developing a state implementation plan which will impose regulatory strategies for ensuring the achievement and maintenance of NAAQS. We expect to receive this SIP for review in the near future. The DEC had adopted an interim policy requiring the permitting of sources with a potential for emitting lead.

Most waste oils are not now defined as a hazardous waste under the Resource Conservation and Recovery Act (RCRA). Indeed RCRA encourages the combustion of waste oils for the purpose of energy recovery and exempts the user from any permitting requirements. The exemption also applies to those who burn such a fuel for heating purposes and to blending and storage facilities. However, whenever other hazardous waste is mixed with waste oil, that mixture is subject to RCRA transportation and storage requirements.

Under our RCRA hazardous waste enforcement program, EPA-Region 2 has conducted truck stopping programs in concert with other Federal agencies and State and local police, transportation, and environmental agencies to check whether hazardous waste transporters are meeting RCRA requirements. While not aimed specifically at waste oil transporters, this kind of effort does, I believe, have a deterrent effect on those who would be attempting to move contaminated waste oil across state lines.

EPA-Region 2 has provided Federal funding as seed money to begin Hazardous Waste Strike Forces in the States of New Jersey and New York. In July, 1979 an initial grant of $500,000 was given to the State of New Jersey to coordinate the hazardous waste enforcement activities of the State's Division of Criminal Justice, Division of Law, Division of State Police, and Department of Environmental Protection with those of the U.S. Attorney and EPA. A subsequent grant of $150,000 continued the State's effort which is now being funded from State resources.

Similarly, an initial grant of $686,000 was made to the New York State Department of Environmental Conservation in the Fall of 1979 to establish a Mid-Hudson Hazardous Waste Strike Force, followed by a subsequent grant of $150,000 in the Fall of 1981. Plans are now underway for the State to assume full funding for the strike force.

Designed to coordinate the activities of the many agencies involved in dealing with hazardous waste enforcement in the States, the strike forces emphasize the criminal enforcement aspects of illegal hazardous waste disposal activities and have provided training in various aspects of hazardous waste law enforcement techniques to State and local criminal justice personnel.

The strike forces have proven to be a viable mechanism for uncovering violations of hazardous waste regulations. Numerous indictments have been handed down against violations in each state as a result of the strike forces' efforts and several convictions and guilty pleas have been obtained in both states. Some of the strike force cases have involved waste oil handlers who are illegally disposing of hazardous wastes.

REGULATION OF WASTE OILS

As noted, the combustion of waste oils for energy recovery is not currently regulated under RCRA and in fact under properly controlled conditions, burning is a preferred method for disposing of some types of hazardous wastes. However, the Used Oil Recycling Act of 1980 directs EPA to establish regulations necessary to protect human health and the environment from the potential hazards associated with waste oil. It will be several months before the Agency completes its analyses and is ready to propose any waste oil regulations. At this point, we have two main concerns regarding the burning of waste oil: First, we want to protect the public at large from indiscriminate burning of contaminated waste oils under uncontrolled conditions. Secondly, we want to encourage the recovery and re-use of unadulterated waste oils either as heating fuel or in some other beneficial configuration.

EPA is now evaluating alternative regulatory strategies for waste oil in order to determine the need for and extent of regulations to meet both of these goals.

EPA will be relying on a U.S. Department of Energy (DOE) study now underway as well as our own testing program to determine hazardous waste combustion characteristics and by-products.

The DOE testing involves collection of actual waste oil samples from collectors, reprocessors, and rerefiners and analysis of the constituents of the samples collected to determine whether toxic contaminants are present and what they are. The waste oil samples will be burned in different kinds of boilers and space heaters and put through tests simulating other uses and disposal methods such as road oiling, disposal into sewage treatment systems, and rerefining/reprocessing to see what actually happens to the contaminants.

EPA is undertaking a program to test the efficiencies of different kinds of industrial boilers for burning various toxic substances. Another program involves testing of incinerators already in operation. A third study to determine the products of incomplete combustion at different temperatures and residence times is underway at the University of Dayton.

We expect that these testing programs will give us the data and information we need to develop a reasonable regulatory scheme for waste oils that sets standards tailored to the waste oils problem to address the specific health and environmental risks posed by this waste stream.

Both New York and New Jersey are listing waste oils as hazardous wastes in their states' hazardous waste management programs and will, I understand, be using the same kind of standard setting approach that EPA is developing.

In conclusion, we share the concerns of this Subcommittee with respect to the distribution and use of contaminated waste oils. The problem is receiving the attention of EPA and State and local regulatory agencies.

EPA Region 2 recently hosted a meeting on the subject of contaminated waste oils with representatives from the States of New York and New Jersey, and from New York City. At that meeting information on the various aspects of each agency's actions on waste oils were discussed and efforts to coordinate standard setting activities, enforcement strategies, and other information exchanges were begun. We are hopeful that these meetings will continue in the future and that other EPA regions and neighboring States such as Connecticut and Pennsylvania will be joining us so that the network designed to deal with contaminated waste oil problems is expanded.

This concludes my prepared statement, Mr. Chairman. We appreciate this opportunity to discuss the sales and use of waste oil as heating fuel with you and will be happy to answer any questions you may have.

Mr. Molinari. We would like the second statement put into the record at this point. What is it entitled?

Mr. Rosenberg. "Statement of the Office of Solid Waste, US EPA."

[The prepared statement of the Office of Solid Waste, USEPA, follows:]

Prepared Statement of Office of Solid Waste, U.S. Environmental Protection Agency

This is a statement for the record concerning the U.S. Environmental Protection Agency's waste oil program. This statement addresses two important aspects of the waste oil problem: first, the problem of increasing the collection and recovery of waste oil, and second, the regulation of waste oil as a hazardous waste.

Nearly three-quarters of a million gallons of waste oils are collected each year, and about 75 percent of that amount is used beneficially as a fuel or is rerefined. Automotive used oil constitutes about 60 percent of the collected oil and industrial oils make up the remainder.

The United States currently collects only about one-half of the used motor oil that could be recovered. It has been estimated that well over 200 million gallons of economically valuable waste oil go uncollected each year. Many Americans are changing their own oil now, instead of having it changed at a service station, and many of these "do-it-yourselfers" do not bring the waste oil into collection centers. One reason for this is that many service stations will not accept this oil, and other collection centers are sometimes not available. Another reason is that the do-it-yourselfer often is unwilling to make the effort to return the used oil.

One important factor in determining whether oil is taken to a collection center is public attitude and perception. The U.S. Department of Energy surveyed a national sample of households in 1980 and found that people who had seen or heard something about oil recycling were more likely to take waste oil to a center than those who had not. Also, people who perceive that recycling oil saves energy and helps protect the environment are more likely to return waste oil. Therefore, informational programs and conveniently located collection centers could help encourage greater waste oil collection. This is primarily a State function, and in fact, about half of all the States do have waste oil recycling programs in place.

Of the waste oil that is collected, some 500 million gallons are burned, almost 100 million gallons are rerefined and just over 200 million gallons are used or disposed of on land. A commonly asked question is whether rerefining is a better use of waste oil than burning as a fuel. The U.S. Department of Energy has estimated that, on the whole, rerefining conserves more energy than burning. However, EPA does not see its role as encouraging one method over the other, but rather as one of encouraging recovery or use over disposal, and assuring, through appropriate regulation, that neither recovery, use, or disposal presents pollution problems. This brings us to the subject of regulation of waste oil recovery, use and disposal.

The regulation of waste oil is a complex problem. First, waste oil is a valuable resource. It can be used and reused in many different ways. EPA believes that under some circumstances, however, some types of waste oil may present environmental and public health problems. Congress directed EPA to resolve this dilemma in the Used Oil Recycling Act of 1980, by establishing regulations necessary to protect human health and the environment from the potential hazards associated with waste oil, and to make sure that those regulations do not discourage the recycling or recovery of oil. In other words, EPA must, if it deems necessary, list waste oil as a hazardous waste, but it need not regulate it in exactly the same way as it does other hazardous wastes.

Charged with this responsibility, the Agency has taken several steps to carry out its mandate. First, in January of 1981, EPA delivered a report to the U.S. Congress which described the types of waste oils which might, at some future date, be regulated under a tailored set of hazardous waste rules. Those oils included: oil tank bottoms, and oil spill debris. EPA believes these oils, if improperly managed, can at times present risks to human health or the environment due to their inherent toxicity, their potential to reach ground or surface waters, or their mixing with other hazardous chemicals.

However, while EPA believes these wastes may in some situations be hazardous, the Agency also believes that much, if not most, of the waste oil being bought and sold today is managed in a way that presents little or no risk to public health or the environment. Used oil, besides being a waste, is also a product with economic value, and the owner of a product will usually take precautions to ensure that the material is not spilled or otherwise lost during transportation or storage before sale. Also, much waste oil is being rerefined, processed and used in a manner that may present no substantial risk. Nevertheless, there is evidence that some transportation, storage, use and burning of waste oil does present substantial potential risks.

The second activity EPA has undertaken regarding waste oil is the determination of the specific management scenarios which actually present a hazard and thus may require regulation. This analysis has proven to be much more complicated than anticipated. The actual risk associated with waste oil depends not only on the type of waste oil in question, but also on quantities of oil involved, whether or not the oil has been adulterated, the adequacy of the device or method used to process, contain, or burn the oil, and on the environmental setting in which the processing or use takes place. The waste oil system includes situations ranging from possible high risk to those having little or no risk. EPA is still sorting out what kinds of risks the different situations pose. If EPA were to regulate all waste oil activities now, we believe some situations would be overregulated, while some would not be adequately regulated.

This problem is further complicated by the fact that many of the businesses that are buying and selling waste oil are small businesses. These businesses, facing economic difficulties, see an opportunity for considerable savings by substituting waste oil for virgin oil. However, resources and expertise to recognize and control potential environmental problems associated with waste oil may be strained if regulations are not carefully tailored. If EPA were to impose a costly set of regulations, many businesses would simply no longer handle waste oil. The end result here would be that less waste oil would be collected, and instead might be disposed of in environmentally unsound ways. Because of all these factors, EPA believes the only responsible course to pursue is to develop sound information on the actual environmental effects of the many different activities involved in managing waste oil before imposing regulations.

Although it will be several months before the Agency is ready to propose any waste oil regulations, EPA has come to some general findings with respect to the waste oil problem. These are:

We believe that the collection, transportation, and storage of used oil should be regulated in a manner that does not impose excessive and unnecessary administrative burden on both the Agency and the waste oil industry. Oils with no market value, such as tank bottoms from oil storage, may constitute the most significant example of oils that may require regulation of collection and transportation.

We believe that waste oils are sometimes used to mask other more dangerous substances, and that the resulting oil/waste mixture is almost always more hazardous than unadulterated oils. These mixtures may not be suited for some uses. For example, road oiling with adulterated mixtures or burning adulterated waste oil as a fuel may cause environmental harm. More study is needed to define the adulteration problem, see if regulation is needed, and if so, to devise an effective regulatory strategy.

While we believe that reclaiming and rerefining of used oil should be encouraged, we have not yet determined whether regulatory controls on these practices are needed. It is important to assure that used oil is delivered to and safely stored at recycling facilities, and it is important to control the waste discharges from these facilities.

We believe that the burning of unadulterated waste oil as a fuel can be accomplished in an environmentally sound manner and should be encouraged. However, such burning may not be acceptable in all types of boilers because of contaminants, such as lead, which may be present in the oil. More study is needed to determine which boilers can safely burn such oils and which cannot.

We believe that the use of waste oil as a dust suppressant, road oil, pesticide carrier, and other similar uses should be carefully controlled.

EPA is currently evaluating problems of waste oil and alternative regulatory strategies for waste oil. We intend to carefully tailor any regulations to address the specific health and environmental risks posed by this waste without regulating the aspects of waste oil commerce which do not pose such risks, and which could be discouraged by inappropriate regulation.

In order to accomplish this goal, the Agency is developing several types of data and information. For example, EPA's Office of Research and Development is finishing a study of air emissions from small waste oil heaters. With our cooperation, the Department of Energy is beginning tests of emissions from burning contaminated oils in boilers, as well as evaluations of other waste oil uses such as road oiling, rerefining, and reprocessing, to determine the fate of contaminants as they move through these processes. EPA has scheduled several tests of emissions from burning hazardous wastes in boilers. These tests should provide important data relevant to the burning of waste oil in boilers. Also, EPA is developing information on the adequacy of tanks, containers, surface impoundments, and other devices that may be used to contain waste oil. This will help us evaluate the cause, extent, and consequences of leaks and spills of waste oil. All of this information should be available within the next several months and should provide a sound foundation for determining how to proceed with waste oil regulations.

Mr. **Molinari.** Jim, in your statement you talked about the strike forces and the cooperation between the States of New Jersey, New York, and EPA region II. I must review with you what transpired last week. To me the events of last week were a shocking exhibition of a State agency that we thought was supposed to be doing a job.

In case you are not familiar with it, a week ago Monday, I made the charge that the Chelsea dump on Staten Island was not properly cleaned up, was not done in a safe manner, and that in fact a lot of the waste oils that were there were contaminated with heavy concentrations of PCB's. The DEC didn't do the job. I called for the resignation of a couple of people.

The following day Commissioner Flacke counterattacked and said that I was irresponsible, reckless, I didn't know what I was talking about, my staff should go back to college, and some other ridiculous statements. But, then he went on make some very powerful statements, that in fact his department would go on record as saying the cleanup was done in a safe manner, swift and decisive, although he admitted the cleanup started in 1978 and there is still work to be done, so I do not know what his definition of swift is.

That does not concern me so much as the fact that 3 days later he does a complete flip, reverses his position, and says that in response to an inquiry that took place last week, which was after my press conference on Monday, that he went after Texaco to double-check. Texaco advised his office that, indeed, the waste oil products that were taken from Chelsea dump may have been contaminated with PCB's. And then samples on last Thursday were taken by the State department of health, tested, and found to be loaded with PCB's. So, of course, he then attempts to cop out by saying "But we were told by Texaco earlier that the PCB's weren't contaminated."

Now, good God, when you just see what happened in this period of 1 week, a very serious dump, the Commissioner himself is making a statement that Texaco told him that it was uncontaminated. Does that mean that DEC then sits back and says, "Well, we were told by the owner it was uncontaminated, therefore the conclusion is that it is uncontaminated"? I have to think that but for the fact that we called that press conference last Monday that we still wouldn't know that information today, and may never have known that information, that serious infiltration of PCB's was permitted to come into, first, the State of New Jersey, and then introduced into heating oils and redistributed as heating oils in the city of New York in several boroughs.

Now, I have to ask these questions; they are difficult questions to ask you because I know you work with these agencies, but isn't this an example of why we can't trust the State agencies with this awesome responsibility of protecting the public from this type of an abuse?

Mr. **Marshall.** Well, I can't comment in detail on the Chelsea-Quanta incident. We are certainly aware of the charges you brought. We did monitor the cleanup of that terminal by DEC. We are concerned very much, as you are, by the revelations that have come out in the last week. We have been speaking to DEC with the idea in mind of reviewing it. Beyond that, I do not think I really ought to comment at this stage. But in general, I would say, and I think almost anyone here in region II would agree, that we have been fortunate in this region, with both the States of New York and New Jersey, to be working with States that have over the years demonstrated a tremendously progressive and hard-working attitude toward environmental protection.

Both of these States have well-funded, sophisticated, and dedicated agencies. I certainly wouldn't go so far as to say that they are perfect or that they never make mistakes or certainly that we never make mistakes. The whole thrust of Federal environmental protection legislation—and the current administration's policy buttresses this even more—is to assume that the States will develop the capability and the will and the determination to carry out the vast bulk of the management, administration, and enforcement of environmental regulations.

I would say that, by and large, our experience with both States with which we deal has been quite positive in that regard. We have delegated a number of our programs to them. I would say in the vast majority of cases they seem to be working well. That does not mean the Federal Government does not have a distinct responsibility to provide oversight, to respond where it appears this delegation has not been carried out properly, to provide assistance where it is not possible for the States to carry out the responsibility.

I hope we are going to do as good a job as we can.

Mr. **Molinari**. That certainly leads to this question: If you monitored DEC's cleanup, how could this tragedy have occurred? And what kind of monitoring took place by EPA?

Mr. **Marshall**. Well, we did a site inspection ourselves at the time of the oil spill. It was reported by the Coast Guard under section 311 of the Clean Water Act. We did indeed find quite a serious condition at the Chelsea terminal. We provided some technical assistance to the State and Coast Guard at that time.

We were satisfied on the basis of subsequent meetings that the State was taking an aggressive role, that Texaco had assumed the liability, and that the cleanup of the site was proceeding.

We did monitor lab results that came out of the various parts of that operation. They appeared to us to reflect first the nature of the problem that certainly did exist, and onsite inspections that we conducted later satisfied us that a pretty major effort had been made to clean it up.

Mr. **Molinari**. Texaco really didn't admit to any liability in the consent decree?

Mr. **Marshall**. That is correct. They did not admit to any liability. They did agree to clean up the site.

Mr. **Molinari**. They were permitted to have a dismissal with prejudice predicated upon the conditions contained within that consent decree?

Mr. **Marshall**. Yes.

Mr. **Molinari**. Did you review the testing techniques employed on the waste oil?

Mr. **Marshall**. To the best of my knowledge and based on our correspondence with Texaco and in view of their lab results, it did appear proper techniques for testing were going on and the analyses appeared as presented to us.

I would say the vast majority of our enforcement programs, whether they be in the hazardous waste area or other areas must by necessity rest on trust of the responsible industries we are dealing with in terms of reporting violations, in terms of monitoring, in terms of analysis. There is just no other way we could police the really quite extensive programs that we have to enforce.

So, it is not at all unusual for EPA or for that matter, other environmental regulatory agencies to assume that, given a reasonable amount of inspection, they are getting proper results back in these cases.

Mr. **Molinari**. Let me ask you a theoretical question. If there was a dump such as Chelsea that was closed, and there was 100,000 gallons of waste oil resting in a tank, what would you expect to be done by way of testing before that oil would be removed?

Mr. **Marshall**. Well, ordinarily, in a hypothetical case, we would expect a thorough analysis of those contents to be made.

Mr. **Molinari**. What does that mean? We are getting to the crux of the question.

Mr. **Marshall**. It is difficult to answer that in a hypothetical case because it would depend upon the nature of the fluid, whether there was sludge, whether it was leaking, what the nature of the surrounding terrain was, the apparent volatility or nonvolatility of the contents.

Mr. **Molinari**. Let's try to leave the hypothetical scene then and go back to the actual scene. We know that we have a dump that was locked up by DEC. We know that there was a great abuse there. We know there was a mixture of chemicals in various barrels, some identified, some unidentified. We know that the individuals involved in operating it had been involved in other questionable operations there, too.

So, the red flag was raised. Now, you have 100,000 gallons and you want to test it before you let a waste oil hauler take it away. What are the techniques in testing? Maybe the best way to get to this is that the way I understand it, there are two ways of testing. If you had the mechanical ability to do so you would completely mix the contents of the tank and then take a sampling out of the mixed solution. That would give you a representative sampling of what is in there; then that would be tested. Or if that is not feasible, the second method would be to take what they refer to as representative samplings. That would mean I assume testing at the top and different strata, including the sludge. Am I correct in that?

Mr. **Marshall**. Well, I think I am getting beyond my expertise in trying to specify all the technical details of how a tank should be sampled. I could certainly have our Edison Lab people give you an assessment and recommendation on that if that would be helpful.

Mr. **Molinari**. Indeed. What I am trying to determine, the information I have is that there was just one sampling taken at the top of the tank. That showed PCB concentrations of less than 50 parts per million. As a consequence they just let it be hauled off as uncontaminated waste oil. I suggest that that was not proper testing in accordance with the guidelines accepted by governmental agencies.

I would like to get an answer to that.

Mr. **Marshall**. Yes. As I said earlier we are certainly interested in receiving the information that has been developed with respect to this case. We will be happy to comment in more detail.

Mr. **Molinari**. On page 3 of your testimony you talk ! about allowable burning of materials of concentrations that do not exceed 500 parts per million. If they do exceed 500 parts per million would you mind stating for the record what your requirements would be?

Mr. **Marshall**. That is a limit up to which you can dispose of PCB's in certain kinds of utility boilers, ConEd, LILCO, what have you, assuming they meet certain requirements. Above that, they must be disposed of only at an EPA permitted facility. We have none in region II that are open for general use. There is one contained within a property, a General Electric facility, but it handles only internal wastes. We have two or three of these facilities permitted elsewhere: Arkansas, Texas. This means that to legally dispose of a material containing in excess of 500 parts per million of PCB's, the waste now has to be shipped to one of these permitted facilities.

Mr. **Molinari**. It would cost them, I believe the EPA record showed, around $600, or in excess per 55-gallon barrel?

Mr. **Marshall**. It would be quite expensive, plus the cost of transportation. I am not sure of the exact figures but it would be expensive, yes.

Mr. **Molinari**. I am sure you heard the testimony of Paul Casowitz earlier today about the dumping of possibly toxic oils containing toxic substances in the landfill sites.

Is that one of the 19 inspections you referred to in your comments a few minutes ago?

Mr. **Marshall**. No; the 19 inspections I referred to are waste oil handlers specifically. TSCA inspections generally deal with PCB related operations. For example we inspect railroads, we inspect utilities for their transformer oils. We inspect industries that use hydraulic oils, so that kind of inspection is not included within the TSCA.

Mr. **Molinari**. That recalls a question I wanted to ask you. On page 2 where you talk about EPA having primary jurisdiction for regulations, does that mean that EPA should share in the blame for what occurred at Chelsea dump or did DEC assume the liability by virtue of the abatement orders they issued and the consent decree they entered into?

Mr. **Marshall**. When I say we have primary enforcement jurisdiction I am referring to the regulations under the Toxic Substance Control Act, which of course does include PCB. But in this case, yes, the State assumed primary responsibility.

Mr. **Molinari**. I have a very serious concern, and that is that in looking at the illegal dumpers, it is not always, but generally, a multi-State operation. And you yourself have talked about how difficult it is, even taking an unscheduled appearance on a highway and trying to stop trucks because of the unique system that they have signaling each other. It is very difficult for a Federal agency. My concern, my own belief is that because it is a multi-State operation that that jurisdiction should remain on the Federal level. I truly don't believe the States can handle it.

Certainly some of the States will not be able to handle it. When you look at New York and New Jersey, they are probably listed in EPA's book as probably two of the most sophisticated in the country. Despite your flattering remarks about the agencies, and indeed, I think their attitudes are very good, I question the results. We have so many documented cases of illegal dumping in New Jersey and in New York that I certainly would have to raise some very serious questions as to the effectiveness of their agencies. Now they are adopting new sets of regulations. I wonder if you would care to comment upon what you would expect to happen with the reduced role of EPA as outlined by Mrs. Gorsuch, and what its impact would be upon this region, which is of prime concern to me?

Mr. Marshall. Well, I think, as I said before, that we are carrying on the thrust that exists in most of the body of environmental legislation under which EPA operates and that is to delegate to the States the responsibility for management and enforcement of these programs. Both New York and New Jersey, in their testimony today, have outlined really quite a substantial body of State legislation and programs, and regulations that they have undertaken in the hazardous waste area. In our view, this compliments the Federal legislation, and in some cases, in both these states they have anticipated the Federal regulation.

Mr. Molinari. Let me interrupt here. Do you know how many inspectors there are in each State testing for hazardous oils and oils containing hazardous substances?

Mr. Marshall. I do not know the numbers, no.

Mr. Molinari. I was told in each case it is two. If that information is correct I do not know how in good God's name we could expect the States to be able to perform the job the regulations say they have to perform.

Mr. Marshall. There is no question the States will have to back up the responsibilities inherent in their delegation with adequate budgeting and resources; there is no question about that.

Mr. Molinari. This problem about truck stops, I think that is a very important question. I am wondering whether you have any recommendation as to other devices or techniques that could be used to randomly check truckers hauling waste oils so you don't run into the problem you have with the present system.

Mr. Marshall. I think on the basis of that experience we concluded that as far as regular EPA enforcement was concerned we would get a better bang for the buck out of concentrating on the generators and the handlers onsite, themselves, rather than trying to stop trucks.

However, one of the hazardous waste strike forces we have funded, the Mid-Hudson in New York State, has had some success dealing with truckers. The main way they have been able to do this is by concentrating on truckers where they have received a tip, where they have some reason based on past performance, where they have observed a generator loading this truck.

In other words, it is not a wholesale stopping of trucks. You just concentrate on those cases where you have a reasonable suspicion of finding something.

Mr. Molinari. If you stop a truck and want to test, what do you test for?

Mr. Marshall. That was what I was about to add. Unfortunately, it is difficult, and again, I am repeating information I have heard recently from our task force, our strike force people, it is difficult both legally and technically to follow up on a truck stop. It is difficult to impound and hold a truck during the period of time necessary to run an analysis. It is difficult unless you have a tip beforehand to know exactly what to test for. What both New York State and New Jersey are working on and what we in the region have been working on with them is some kind of criteria that could be used as a fast test to decide where a waste oil or waste fuel does fit within reasonable characteristics.

The kinds of parameters that the States are looking at are the sulfur content, which is obvious. But also the flashpoint, or the chlorine content that might show whether other chlorinated hydrocarbon wastes have been put in there; the lead content, and that kind of thing. This of course is also the kind of information and guidance that we expect to get out of the DOE and the EPA research programs which I mentioned earlier, so we do definitely need better and faster methods for quickly testing these trucks.

Mr. Molinari. I think we heard Mr. Booth talk about DOE's testing program being defunded by OMB. Do you know whether that is a fact?

Mr. Marshall. I am not sure which program he was talking about. They do have a program that we are relying on, I described in my testimony and was described in more detail in the statement I submitted for the record.

Mr. Molinari. Just a second, Mr. Booth, we will ask you to answer that. Did I make a mistake?

Mr. Booth. No, but I would comment on that.

Mr. Molinari. I will ask you a question in just a second. Getting back to Chelsea, knowing what has been done, forgeting for the moment the atrocities that occurred there, are you prepared to say that what is there now is safe and clean and that there are no toxic materials left there that presents a threat to the public health?

Mr. Marshall. Well, I do not think I could say that categorically sitting here at this table without having a chance to go over this new information that you have developed.

Mr. Molinari. Would you mind reviewing that for me?

Mr. Marshall. I would be happy to.

Mr. Molinari. I would appreciate that very much. If you would like to make a comment, Mr. Booth, on this question that I raised, I would be happy to have an interruption at this point.

Mr. Booth. The particular project that EPA is referring to is, I believe, the study that was awarded to GCA Technology to examine the fate of hazardous contaminants in waste oil by various recycling processes. That particular contract has been threatened because it is a part of the conservation division of the Bartelsville Engineering Technology Center in Bartelsville, Okla. They are talking about not just doing away with the department but actually cutting off these contracts in midpoint where the front-end work has been done, but you will get no results. So, it is being seriously threatened right now by OMB. We have gotten very good information that this is true. So, I would certainly recommend that the EPA also——

Mr. Marshall. That is indeed the program I was talking about, Mr. Booth, so I am not pleased to hear that either.

Mr. **Booth**. Dennis Brinkman is the project director in Oklahoma.

Mr. **Molinari**. Thank you very much. Maybe we both will check on that, Jim. Oh, yes, do you have any estimate, Jim, as to the number of waste oil dealers in New York today?

Mr. **Marshall**. I don't have such an estimate, no.

Mr. **Molinari**. Would there be a record of that in the EPA region? Let me say this to you. I would like to know if they have available the number of waste oil dealers and collectors of hazardous wastes, the two classifications, if that information is available?

Mr. **Marshall**. Yes; we do have an inventory of hazardous waste generators, transporters, and handlers. We do have that and can make that available.

Mr. **Molinari**. The city depends on sulfur standards for enforcement. Yet we heard Mr. Berkowitz testify that lubricating oil does not have sulfur, except the cutting oils. Is the sulfur law useful in dealing with burning waste oil?

Mr. **Marshall**. Well, I do not think so. I heard Mr. Wells talking about that earlier. Sulfur is certainly a component of oil that we are concerned about from an air pollution standpoint. But it is not per se an indication of whether you have waste oil there or whether you are contaminated with something else, because most crude oils contain a certain amount of sulfur to begin with, and it is by no means necessarily removed by the refining process, so the sulfur content of fuel in the New York City area indicates only whether you are using a low-sulfur fuel oil to begin with. Presence of sulfur does not indicate it has become contaminated by something else.

Mr. **Molinari**. Do you have questions?

Mr. **Rosenberg**. I have one question the chairman left with me, Mr. Molinari.

Congressman Bedell earlier today expressed his concern about the delay in EPA's issuing regulations. In going through the statement from Solid Waste, we see a statement that says, "Although it will be several months before the agency is ready to propose any waste oil regulations . . ." and so on. One of our earlier witnesses had indicated that the feeling within the waste oil industry is that it might be as much as 18 months longer that we are going to have to wait. I am wondering if you are able to give us any more precise information than this one vague sentence that is in this statement.

Mr. **Marshall**. No, I am not able to define what several months means. I will be happy to see if we can get a clarification from the Office of Solid Waste, but I myself cannot define that.

Mr. **Rosenberg**. I think the chairman's desire would be to get as precise a statement as we could. I know he is concerned, for instance, by reports that the staff person at the EPA Washington headquarters who had been working on these regulations recently left that assignment and there is now somebody totally new to the subject area who is assigned to complete this task, which I think causes the chairman to be concerned about deadlines slipping.

Mr. **Marshall**. Well, we will be happy to ask them to give you a better definition of several months.[9]

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[9] See app. F.

Mr. **Rosenberg**. Thank you.

Mr. **Molinari**. I have no further questions. I would like to thank you, Jim, so much for sharing your thoughts with us on a very important subject.

That concludes the list of those scheduled witnesses. Now I would like to see a show of hands if there are others here. I understand there may be a couple of others who want to testify. Does anybody here wish to speak on the subject matter?

Thank you.

[Whereupon, at 1:20 p.m., the subcommittee adjourned, to reconvene subject to the call of the Chair.]

APPENDICES

APPENDIX A.—"RECYCLING USED OIL" REPORT PREPARED BY THE CONGRESSIONAL RESEARCH SERVICE OF THE LIBRARY OF CONGRESS

Congressional Research Service
The Library of Congress

Washington, D.C. 20540

RECYCLING USED OIL

By

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January 28, 1982

Each year, from the 2.9 billion gallons of new oil purchased in the United States about 1.5 billion gallons 1/ of waste oil are generated. About half comes from automotive operations (including buses and trucks), and the other half from industrial use (including, e.g., railroad and marine engines, and metalworking). In 1980 the Environmental Protection Agency (EPA) estimated that 50 percent of used and waste oil was burned as fuel, 14 percent was used for road oiling or similar purposes, 29 percent was disposed either directly to the environment or with garbage and trash, and only 7 percent (100 million gallons) was re-refined or reclaimed. 2/ Other estimates put the amount re-refined at 25-50 million gallons per year and the amount reclaimed at about 100 million gallons.

1/ Statistics on waste oil and its reuse are "soft." At a Senate hearing in 1980 the Environmental Protection Agency estimated that 1.4 billion gallons of used and waste oil were generated annually, while the Department of Energy put the figure at 1.6 billion gallons. Differences in definition add to the problem: the Association of Petroleum Re-refiners said that over 900 million gallons "are potentially recoverable for re-use," while the National Bureau of Standards estimated that there were "1.2 billion gallons of collectable used oil" generated annually. U.S. Senate. Committee on Environment and Public Works. Recycling of Used Oil. Hearing on S. 2412, 96th Cong., 2nd Sess., May 5, 1980. Washington, U.S. Govt. Print. Off., 1980. p. 52, 56, 74-75, 91. (Hereafter cited as Senate Hearing.)

2/ Re-refining involves a series of processes which remove contaminants picked up by the oil and additives which have been exhausted in use. It may then be blended with virgin oil and receive a new additive package appropriate for its new use. Reclaiming may mean simply taking an oil that has become too dirty for its original purpose and reusing it for non-critical lubrication; usually, however, it means reprocessing the oil to some degree short of re-refining.

The number of re-refiners declined over the last two decades from over 150 companies producing over 300 million gallons in 1960 to around 40 companies with a capacity of about 100 million gallons in 1972, to five or six companies re-refining 25-50 million gallons in 1980. 3/

A Comparison With European Countries

It is worth comparing the American situation with that of other industrialized countries. The following table shows the products of oil recycling as a percentage of total lubricant use, both automotive and industrial. What is recycled varies from country to country.

Oil Recycling in Certain European Countries 4/
(metric tons)

	Total Lubricant Market	Recycled Oil	Percentage
Belgium	200,000	2,000	1.0
Germany	1,100,000	216,000	19.7
Great Britain	960,000	38,000	4.0
Italy	540,000	70,000	13.0
Netherlands	215,000	10,000	4.7
United States	2.9 billion gallons	100-150 million gallons	3.4-5.1

3/ Senate Hearing, p. 12; and U.S. Environmental Protection Agency. Report to Congress: Waste Oil Study. Washington, U.S. Govt. Print. Off., 1975. p. 86.

4/ Patrick Brassart. The Current State of Re-refining in Europe. In Association of Petroleum Re-refiners. Third International Conference on Waste Oil Recovery and Reuse (Proceedings). Washington, Association of Petroleum Re-refiners, 1978. p. 9-11. U.S. figures from Senate Hearing, p. 41, 52, 56.

Belgium's small industry, for example, performs only simple treatment of turbine and transformer oils; while in Germany, where the incineration of waste oil must be non-polluting, the amount includes reprocessing for use as a fuel as well as production of lube oils and other products. The figures are for 1977, except for the Netherlands which is 1975; the Dutch industry succumbed to economic pressures and no longer exists. The comparable figure for the United States is about 3.4-5.1 percent, if we put the amount re-refined or reclaimed at 100-150 million gallons in a total market of 2.9 billion gallons (the table is in metric tons).

Italy's 13 percent recycled oil share of the market is credited to a 1940 law which preferentially designates waste oils for recycling, though in practice only the civil and military administrations and public companies observe the mandate. Also, a lower tax is levied on recycled oils than on virgin oils.

German Oil Recycling 5/

The success of the West German effort is due to several factors, of which a key one is a government subsidy which has existed in various forms since 1953. The present law, enacted in 1969, imposes a form of

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5/ Except as noted this section is based on: Paul Plechatsch. Waste Oils Recovery in the Federal Republic of Germany. Annex I in Organization for Economic Co-operation and Development. Economic Instruments in Solid Waste Management. Paris, OECD, 1981. p. 51-87.

product charge on sales of lubricating oil to internalize the costs of safe disposal of waste oil. The tax is paid into a trust fund from which payments are made for the collection and non-polluting disposal of used oil; incineration was also eligible for the subsidy payments until 1979 when the practice was discontinued. Whether incineration or re-refining is employed, the facilities are licensed in accordance with environmental protection legislation. The tax was raised by an amendment to the law in 1976 to accommodate greater amounts of waste oil being recovered, and the subsidy has been adjusted both up and down by regulation.

Companies receiving the payments are required to collect all used oil within a specified district free of charge. If the oil contains over 10 percent foreign matter a fee may be assessed on the generator, however. The districts are not exclusive, and companies may enter other areas. The purpose of the districts is simply to ensure that the whole country is covered. Supplementary payments can be made for wastes that are particularly difficult or expensive to retrieve, such as those from drilling platforms in the North Sea and ships' bilge oil.

Since the current law went into effect in 1969 the number of companies in the industry has fallen from 19 to 9, with one new firm entering the field. The degree of concentration is also revealed by 1977 statistics showing that the three largest companies had 75.9 percent of the waste oil subsidized for reprocessing, and 53.6 percent of the waste oil subsidized for burning.

Two other factors contributing to the success of the German effort should be mentioned. One is that the price differential between lubricating oil and fuel oil is so large that re-refiners are able to pay the fuel oil price for their used oil feedstock and still make a profit. 6/ By contrast, in the United States the price differential is much smaller and re-refiners find it harder to compete for sources of used oil. This is a prime reason why at least half of U.S. oil is burned.

Secondly, engine manufacturers have made an effort to control the quality of lubricating oil. They regularly test the oils and publish a list of those acceptable for use in their vehicles. A number of re-refined oils are included. An oil which fails a test is removed from the list and a notice to that effect is sent to dealers and service facilities. Samples may also be taken from retail outlets, tested, and compared to the samples originally submitted to the auto companies. This is said to be a powerful deterrent to lowering standards. 7/

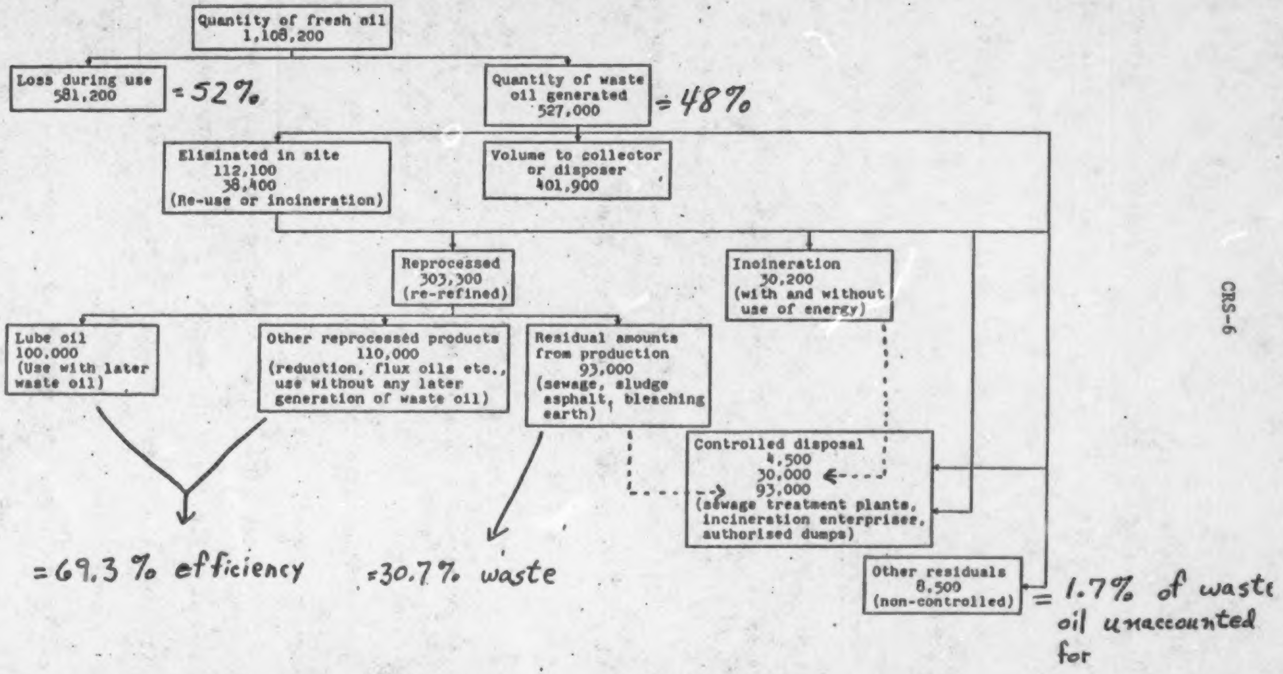
6/ Senate hearing, p. 29.

7/ D.A. Becker. Testing and Use of Re-refined Engine Oil in Europe. In U.S. National Bureau of Standards. Measurement and Standards for Recycled Oil—II (Procedings of a conference, November 29 and 30, 1977). Washington, U.S. Govt. Print. Off., 1979. p. 142.

The Path of Waste Oil in Germany, 1977

Diagram 1

(Quantities in tonnes)


Quantity of fresh oil 1,108,200
Loss during use 581,200
= 52%
Quantity of waste oil generated 527,000
= 48%
Eliminated in site 112,100 38,400 (Re-use or incineration)
Volume to collector or disposer 401,900
Reprocessed 303,300 (re-refined)
Incineration 30,200 (with and without use of energy)
Lube oil 100,000 (Use with later waste oil)
Other reprocessed products 110,000 (reduction, flux oils etc., use without any later generation of waste oil)
Residual amounts from production 93,000 (sewage, sludge asphalt, bleaching earth)
Controlled disposal 4,500 30,000 93,000 (sewage treatment plants, incineration enterprises, authorised dumps)
Other residuals 8,500 (non-controlled)
= 69.3 % efficiency
= 30.7% waste
= 1.7% of waste oil unaccounted for

Source: Paul Plechatsch. Waste Oils Recovery in the Federal Republic of Germany. Annex I in Organization for Economic Co-operation and Development. Economic Instruments in Solid Waste Management. Paris, OECD, 1981. p. 54 (percentages and dotted lines added).

The German results are impressive. The diagram on the next page showing the path followed by waste oil in Germany provides additional details. Particularly noteworthy is the box in the lower right-hand corner. Less than 2 percent of the waste oil is unaccounted for and free to pollute the environment.

U.S. Oil Recycling

The decline of the U.S. re-refining industry has been credited to three major problems: (1) Federal disincentives, now largely eliminated by legislation enacted in the 1970's; (2) collection of waste oil, still a difficulty; and (3) disposal of the residues from waste oil re-refining. Today it appears that the re-refining industry may be emerging from its 20-year slump.

Three Federal Disincentives. Federal procurement specifications for automotive lubricating oils which are set by the Defense Supply Agency and are widely copied by State and local governments and industry, excluded re-refined oils solely on the basis of their origin rather than relying on quality standards. The Resource Conservation and Recovery Act (RCRA, P.L. 94-580) directed Federal officials to eliminate from specifications any exclusion of recovered materials and any requirement that items be manufactured from virgin materials. The Energy Policy and Conservation Act (P.L. 94-163) called for officials to encourage procurement of recycled oil and to educate the public concerning its merits. Also, the National Bureau of Standards was instructed to develop test procedures for determining the equivalency of re-refined oil and new oil for a particular end use.

The second impediment was brought about by the Excise Tax Reduction Act of 1965 which, together with subsequent Internal Revenue Service rulings, placed re-refined oil at an economic disadvantage compared to virgin lubricating oil. The situation was redressed in the Energy Tax Act (P.L. 95-618).

The third item was the decision of the Federal Trade Commission which required re-refined motor oils to be labeled "previously used," implying that they were inferior products. The Used Oil Recycling Act (P.L. 96-463) voided that decision and authorized a grant program to States to set up programs encouraging the collection of old oil and the reuse of recycled oil; authorized at $5 million annually for fiscal years 1982 and 1983, the program was cut by the administration.

Collection. Collecting used oil remains the weakest link in the oil recycling chain. It is most likely to be picked up when it is accumulated in fairly large amounts, as at fleet garages or industrial sources. The trend of automobile owners to "do-it-yourself" has reduced the amount of automotive lube available; currently 50-60 percent of private car owners are estimated to fall in this category, accounting for around 400 million gallons annually. The majority of this oil is disposed indiscriminately.

But not all used oil that is gathered in large quantities is made available for re-refining. Significant amounts are believed to be reclaimed or burned in-house.

In 1980 EPA estimated that there were 5,000 small collectors. A 1974 EPA-sponsored study described them as follows:

> a. The waste oil industry is highly fragmented, ephemeral, and not easily characterized in terms of the average operator or firm.
>
> b. Many firms, both old and new, seem to run their businesses in a highly informal and flexible manner, often operating out of temporary facilities with no formal address or phone number.
>
> c. Waste oil firms, in general, keep either poor records or no records.
>
> d. Collectors and collector/processors are not cooperative respondents [to interviews]. 8/

From discussions with knowledgeable people while preparing this report, it appears that these negative remarks are not as true today as when they were written. Perhaps the first observation is the best one: that the "average operator" is "not easily characterized." The 1974

8/ As reported in U.S. Department of Energy. Utilization of Used Oil, Volume I: Industry Status and Projections. Prepared by G.J. Mascetti and H.M. White, The Aerospace Corporation, El Segundo, California, December 1977. Reprinted in U.S. House. Committee on Science and Technology. Used Oil Re-refining. Hearing, 95th Congress, 1st Session, December 12, 1977. Washington, U.S. Govt. Print. Off., 1978. p. 348-349.

report also noted that 38 percent of collectors owned a single truck, and only 21 percent owned five or more trucks. The majority of small collectors operated within a radius of 100 miles.

Disposal of Waste Oil Residues. The major process for re-refining waste oil for many years was acid/clay treatment which generates an acid sludge residue that is hazardous. In addition, the technology's economics were poor and alternatives were being sought even before enactment of the Hazardous Waste Subtitle of the Resource Conservation and Recovery Act of 1976 (RCRA). The amount of re-refined oil being produced by acid/clay treatment declined from 90 percent in 1970 to 56 percent in 1977. By 1980 most plants using acid/clay had closed or changed their process.

In the same decade new technologies were emerging which promised significantly greater quantities of marketable by-products, much improved economics, and less dangerous wastes. At present the industry appears to be in transition, cautiously seeing which of the new processes actually deliver on their promises.

Impact of RCRA. Subtitle C of the Resource Conservation and Recovery Act called for the establishment of a cradle-to-grave system for assuring the proper disposal of hazardous wastes. It impacts oil re-refining in two ways. First, the unmarketable residues which meet the definition of "hazardous waste" will have to be handled, transported, and disposed in accordance with Environmental Protection Agency regulations. This will increase the operating costs of the re-refiners. Secondly, as the agency reported to Congress on January 16, 1981, the waste oil itself will be classified as a hazardous waste, which could cut two ways. On the one hand it could lead to more used oil being made available to re-refiners, easing their perennial search for additional feedstock. If accompanied by adequate enforcement, much of the oil presently burned without appropriate air pollution control or otherwise unsafely disposed could be reclaimed and reused. On the other hand, if stringent transportation, storage, and record-keeping requirements are imposed by EPA, operating costs would again be raised. The Used Oil Recycling Act of 1980 directed the agency to ensure that the RCRA regulations did not discourage recovery or recycling, but reiterated the need to protect public health and the environment. It also called for those regulations to be issued by October 15, 1981. They have not yet appeared.

Two State Programs

Within the last four years, two States embarked on oil recycling programs which appear to be working out successfully. North Carolina re-refines its own oil and California's collection program has doubled the amount recycled.

North Carolina. This State has essentially gone into the re-refining business by purchasing a turnkey plant from the Phillips Petroleum Company. Referred to as the PROP (Phillips Re-refined Oil Process) facility, it has an annual capacity of 2 million gallons and was funded by a loan from the State government; the construction cost was $1.4 million. The plant has been operating regularly for a year, producing 50,000 gallons of automotive lubricating oil in the first 6 months and 97,000 gallons in the second 6 months. Their goal is to double that amount in the first half of 1982. Twenty-three thousand vehicles are using the oil and no problems have been reported. The manager of the Recycled Oil Program at the National Bureau of Standards has called their product the best re-refined oil he has seen.

Forbidden by the legislature to compete in the marketplace, the facility's feedstock is obtained from State, city, and county government garages. It is gotten free in exchange for low-cost re-refined oil. Early problems in obtaining a sufficient supply have apparently now been overcome and the plant is operating on two shifts. Their throughput costs are still high, reportedly between $1.80 and $2.00 per gallon, but will decline when the plant goes to three shifts. The financial break-even point is claimed to be around the 400,000 gallon level.

Two reasons have been cited for their success. One is that their feedstock is uniform: crankcase drainings uncontaminated by other oils. Secondly, the director of the North Carolina Oil Re-refining Facility, Gil Holland, gives a great deal of credit to the technical and economic advice he receives from the State universities, several faculty members of which sit on his advisory board.

California. The California program began in 1979 and aimed at ending the illegal dumping of used motor oil. They now have 2,000 voluntary collection points, primarily service stations and recycling centers where individuals can leave their oil. Retailers selling over 500 gallons a year are required to display signs identifying the nearest centers, and containing a toll-free telephone number that consumers can call to learn of other drop-off points.

Under State law waste oil is a hazardous waste requiring a manifest a la RCRA, but the provision is waived for crankcase drainings. Instead, a receipt system has been instituted. The transporter gives a receipt to the service station or recycling center, and the recipient of the oil gives a receipt to the transporter. An annual report to the State is required of all parties. Collectors must be registered and their permits can be revoked for failure to keep records or for keeping inadequate records; a $1,000 fine per day can be levied. They are also subject to the broader California hazardous waste regulations and penalties. About 40 percent, 36.5 million gallons, is currently recycled. It is estimated that about 20 million gallons was recovered before the program began.

While hardly overwhelming, this program is testimony to the significant impact that increasing public awareness can have. It is run by one person with a $75,000 budget aided by occasional part-time student volunteers. Most of the money is spent for printing and public service announcements.

APPENDIX B.—PRESS RELEASE DATED FEBRUARY 11, 1982, ISSUED BY NEW YORK DEPARTMENT OF SANITATION

Sanitation Commissioner Norman Steisel announced today the immediate dismissal of a senior uniformed sanitation officer who was charged with having disobeyed various Department rules and paid off a subordinate worker to dig holes in a Staten Island landfill to allow for the illegal dumping of liquid waste at the site.

Commissioner Steisel said the immediate firing of Superintendent John Cassiliano, 53, of Brooklyn, followed the officer's appearance yesterday before a departmental trial, presided over by Deputy Commissioner for Trials, JoAnn Ferdinand. The Department was represented by Inspector General J. Kevin McKay.

Cassiliano was found guilty of having paid a tractor operator at the Department's now-closed Brookfield Truckfill on Staten Island to dig holes in the land bank of the disposal facility to allow for a number of large, out of state, tanker trucks to unload liquid waste. The tractor operator, the chief witness for the Department, was granted immunity from departmental disciplinary action in exchange for his truthful testimony.

The firing of the truckfill supervisor comes on the heels of allegations that toxic wastes had been illegally dumped at certain Department disposal locations during the period from 1978 to 1979. The allegations were contained in testimony from a 1980 trial in Pennsylvania which charged that illegal dumping of toxic waste had occurred at three City landfills, raising suspicions that Department employees had been paid off in order to allow the illegal dumping to occur.

"The dumping of liquid wastes is prohibited at our landfills," said Commissioner Steisel. "It came as a surprise to me to learn that there had been serious allegations concerning the possible dumping of wastes at our locations. Therefore, I ordered my Inspector General, J. Kevin McKay, to pursue these serious charges with all deliberate speed."

Commissioner Steisel praised McKay for his expeditious review and handling of the investigation and trial, particularly since Cassiliano was preparing to retire. Under current law and Civil Service regulations, Cassiliano's pension was scheduled to vest on February 11, 1982, 30 days after he filed for retirement.

Commissioner Steisel had similar praise for the conduct of the trial by Trial Commissioner Ferdinand, who had to hear the evidence and recommend a decision under extreme time limitations.

Cassiliano, who had been senior supervisor of the Department's truckfills since 1979, will forfeit his retirement benefits. His salary was $41,193.

According to testimony presented at the departmental trial:

Cassiliano, on frequent occasions during the midnight to 8 a.m. shifts during the period of September 1977 to January 1979, paid sums of money ($10 to $20 per night) to 62-year-old Anthony Socci of Staten Island, a tractor operator at the Brookfield Avenue Truckfill located at Brookfield Avenue and Arthur Kill Road, Staten Island, and directed Socci to bulldoze a site for out-of-state tanker trailer trucks to dump their liquid wastes.

Socci, a 32-year veteran of the Department, testified that he recalled an occasion in 1977, shortly after Cassiliano was assigned to be the night superintendent in the area, when Cassiliano told him to dig a hole with his tractor in the garbage. Socci followed his order and dug a hole several feet deep. Later, two or three tanker trucks arrived at the Brookfield site and dumped their black liquid contents in the hole. Although he could not identify the liquid, he smelled "oil" or "burnt oil." After the trucks departed, he recovered the site with garbage. Cassiliano later handed Socci $30 in a closed fist, and said "here's for coffee."

The witness testified that this same thing happened intermittently throughout 1977, 1978, and early 1979, sometimes several times each week, but sometimes not at all. After the first time Cassiliano gave Socci money—usually $10 or $20—on some but not all of the occasions; however, he did not say anything about the money after the first or second time. The witness estimated he received $200 or a little more. On some occasions, the tankers got stuck and the witness had to pull them out with his tractor. He explained that he dug the hole away from the active bank.

Socci said that on several occasions he was told by Cassiliano to prepare holes for dumping the liquid waste. He would receive a phone call at Brookfield telling him how many trucks were coming that night. Once or twice Socci received the call, while on other occasions he got a message regarding how many trucks would arrive. The message was phrased that he should expect so many (trucks) "for dinner." Socci noted that the tanker trucks had out-of-state license plates.

On one occasion, Socci said Cassiliano wasn't present when the tankers dumped and he told him that he didn't want to be there alone when the activity went on. He told Cassiliano that he "didn't want the responsibility of being caught alone." At the time, there were no other officers assigned to the night tour. Socci said that in early 1979, different people started working the midnight shift at Brookfield and the dumping practice stopped.

Socci estimated that the size of the hole he dug varied but, that an average hole would be about 15' wide x 15' long and several feet deep. He only dug one such hole a night except on one occasion when he recalled that more trucks than expected showed up and he had to dig another hole. Socci said that the tankers had 16 or 18 wheels and each one took 15 to 20 minutes to dump by opening a valve in the back of the tanker after it was backed up to the hole. Socci said that the first time he dug a hole was because Cassiliano (who was appointed to the Department in 1963) specifically ordered him to do so. Thereafter, he was told by Cassiliano or by a message, to expect tankers on 15 to 20 other nights during the 1977 to 1979 timeframe.

Another witness called by the Department to testify at the trial reported having seen tanker trucks enter the landfill on Staten Island during unauthorized nighttime shifts. Waste oil was used by the Department to cover dirt roads at landfills to control flying dust, but that practice was discontinued in November 1979 after environmental concerns were raised about its potential danger.

Commissioner Steisel said that the Department is conducting a series of borings at its landfills to determine whether the alleged illegal dumping of liquid waste has posed any danger to the environment in and around the disposal sites. Preliminary tests of the landfills have shown no existence of potentially dangerous conditions.

APPENDIX C.—LIST OF WASTE OIL TRANSPORTERS IN NEW YORK STATE, FURNISHED BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
Albany, N.Y., February 4, 1982.

Mr. JIM KULIKOWSKI,
U.S. House of Representatives,
Washington, D.C.

DEAR MR. KULIKOWSKI: At the request of Albert Muench of this Division, I am enclosing a list of waste oil transporters in New York State.

The permit numbers listed indicate the address of each transporter. For example, a 2A number means the address is in DEC Region 2—New York City; 1A means DEC Region 1—Nassau and Suffolk County; JA means New Jersey; other letters conform with the State's abbreviation except for FA which is Canada.

Also, please note that this list is in constant need of revision. I therefore recommend that you contact this office to determine the current permit status of any particular transporter.

Sincerely,

NORMAN R. DRAPEAU, P.E.,
Supervisor, Operations Section,
Bureau of Hazardous Waste, Division of Solid Waste.

Waste Oil List (Permit Number, Hauler, and Number of Vehicles)

JA-123—Environmental Recovery Service, Inc., P.O. Box 732, Bound Brook, N.J. 08805	1
JA-114—Narrows Carriers, Inc., Jernee Mill Road, Sayreville, N.J. 08872	3
OH-028—Ace Liquid Waste Haulers, Inc., 3715 Beechmont Court, Cincinnati, Ohio 45226	3
FA-006—Tricil Limited, 6785 Route 132, Ville Ste. Catherine, Quebec J0L 1E0	6
JA-016—Intercity Tank Lines, Inc., Jernee Mill Road, P.O. Box A-7, Sayreville, N.J. 08872	5
2A-098—Brooklyn Union Gas Co., 195 Montague Street, Brooklyn, N.Y. 11201	1
PA-051—General Electric Co., 1040 East Erie Avenue, Philadelphia, Pa. 19124	9
9A-038—Carborundum, P.O. Box 337, Niagara Falls, N.Y. 14302	4
JA-087—Lionetti Oil Recovery, Inc., R.D. No. 1, Box 5A, Old Bridge, N.J. 08857	4
MA-020—Petroleum Salvage Co. of N.E., 443 Merrimac Street, Newburyport, Mass. 01950	1
JA-137 NOC Enterprises, Inc., Route 206, Vincetown, N.J. 08088	2
1A-003—Long Island Lighting Co., 175 East Old Country Road, Hicksville, N.Y. 11801	1,400
7A-020—Niagara Mohawk Power Corp., 300 Erie Boulevard, West Syracuse, N.Y.	1,203
7A-061—General Electric Co., Building 9, Room 101, Syracuse, N.Y. 13221	6
7A-091—Dowzer Electric Division, P.O. Box 587, 215 South Main Street, Cortland, N.Y. 13045	1
MI-003—A-1 Disposal Corp., P.O. Box 248, 400 Broad Street, Plainwell, Mich. 49080	11
OH-005—Chemical Waste Mgt., d.b.a. O.L.D., 504 Liberty Street, Fremont, Ohio 43420	15
8A-032—Verdi Construction, Route 32, Savannah, N.Y. 13146	6
JA-074—Shannon Waste Oil and Chemicals, P.O. Box 736, Maywood, N.J. 07607	1
1A-074—Ricks Island Waste Oil Co., 23 First Street, Patchogue, N.Y. 11772	1
2A-029—Chemical Waste Disposal Corp., 42-14 19th Avenue, Astoria, N.Y. 11105	2
5A-053—Interstate Oil Service, P.O. Box 137, Galway, N.Y. 12074	1
7A-003—NYS Electric & Gas Corp., 4500 Vestal Parkway, East Binghamton, N.Y. 13902	360
7A-075—Endicott Johnson Corp., 1100 East Main Street, Endicott, N.Y. 13760	4
6A-016—Waste Oil Service (Harvey F. Storie), P.O. Box 36, Deer River, N.Y. 13627	1

9A-193—Sierra Research Corp., 247 Cayuga Road, Cheektowaga, N.Y. 14225	1
8A-099—Kneppar Resource Recovery, Inc., 1 Flint Street, Rochester, N.Y. 14608	1
9A-131—Trico Products Corp., 817 Washington Street, Buffalo, N.Y. 14203	9
JA-141—General Marine Transport Corp., 1 Ingham Avenue, Bayonne, N.J. 07002	1
JA-039—Eastcoast Pollution Control, Inc., P.O. Box 275, Cenco Boulevard, Clayton, N.J. 08312	6
PA-034—AMO Pollution Services, Inc., R.D. No. 2, Box 311 B, Canonsburg, Pa. 15317	4
1A-042—Chemical Pollution Control, Inc., 120 South Fourth Street, Bay Shore, N.Y. 11706	12
1A-041—Marine Pollution Control, Inc., P.O. Box 220, East Patchogue, N.Y. 11772	4
1A-070—S. & E. Waste Oil Service Inc., P.O. Box 355, Glen Head, N.Y. 11545	4
3A-037—V.A.W. of America Inc., Route 209, Ellenville, N.Y. 12428	1
7A-029—Allwash of Syracuse, Inc., P.O. Box 605, Syracuse, N.Y. 13201	3
9A-099—Smith and Lockwood, Inc., 109 Linwood Avenue, Buffalo, N.Y.	21
FA-015—Scandex Chemical Services, 29 Trilliam Park Place, Kitchener, Ontario N2E 1X1	1
JA-112—S & M Waste Oil Inc., 48 Beardslee Drive, P.O. Box 62, Ogdensburg, N.J. 07439	2
JA-118—Oil Transfer Co., 345 Lorillard Avenue Union Beach, N.J. 07735	6
JA-042—RA-MAR Waste Management Corp., 4 Houvenkopf Road, Mahwah, N.J. 07430	1
1A-008—County Tank Lines, Inc., Routes 58 and 25, Riverhead, N.Y. 11901	7
1A-045—Richco Oil Co., 23 Fairmont Street, Huntington, N.Y. 11743	
3A-050—Ken-Nan Oil Tank Cleaners, P.O. Box 487, New Paltz, N.Y. 12561	1
3A-027—L. & H. Steel Drums, P.O. Box 605, Yonkers, N.Y. 10702	1
ME-012—Main Oil Recycling Inc., Depot Street, Buckfield, Maine 04220	2
7A-092—Renshaw Bay Corp., Fisher Road, East Syracuse, N.Y. 13057	6
8A-011—Crosman Air Guns, 980 Turk Hill Road, Fairport, N.Y. 14450	2
8A-056—E. & L. Piping, Inc. 190 Murray Street, Rochester, N.Y. 14606	1
9A-090—CECOS International Inc., P.O. Box 619, Niagara Falls, N.Y. 14302	14
9A-124—L. E. Ott, Inc. 61 Fillmore Ave, Tonawanda, N.Y. 14150	2
MA-031—Electric Power Testing Services, Inc., 1020 Turnpike Street, Canton, Mass. 02021	2
JA-125—Detrex Chemical Ind. Inc., 835 Industrial Highway, Cinnaminson, N.J. 08077	1
1A-044—Janic Waste Oil Corp., 30 Ray Street, Freeport, N.Y. 11520	1
2A-096—H. & B. Waste Oil, Inc., 24-16 95th Street, East Elmhurst, N.Y. 11369	1
3A-055—Sarge Oil Co., Camp Hill Road, Pomona, N.Y. 10907	2
8A-009—Raeco Prod., P.O. Box 404, Rochester, N.Y. 14603	3
8A-017—Rochester Gas & Electric Corp., 89 East Avenue, Rochester, N.Y. 14649	1
M1-005—Metalworking Lubricants Co., 6785 Telegraph Road, Birmingham, Mich. 48010	7
OH-003—Erieway Pollution Control, 33 Industry Drive, Bedford, Ohio 44146	4
VT-001—New England Marine Contractors, Inc., 1 Mill Street, Burlington, Vt. 05401	6
9A-085—Superior Pipecleaning Inc., S-3313 Woodlawn Avenue, Woodlawn, N.Y. 14219	6
JA-103—Continental Vanguard Inc., 204 Harding Avenue, Ballmawr, N.J. 08031	12
7A-027—West Central Environmental Corp., P.O Box 714, Auburn, N.Y. 13021	5
9A-063—Elmwood Tank Cleaning Corp., 62 West Market Street, Buffalo, N.Y. 14204	7
JA-030—Perk Chemical, 217 South First Street, Elizabeth, N.J. 07206	11
CT-011—TriChem Environmental Industries Inc., P.O. Box 360, Stamford Conn. 06904	6
AL-002—Specialized Oil, Inc., Route 4, Box 32-A, Hartselle, Ala. 35640	1
CT-018—Connecticut Treatment Corp., 51 Broderick Road, Bristol, Conn. 06010	3
CT-003—Hitchcock Gas Engine Co., 40 California Street, Bridgeport, Conn. 06608	7

FA-001—Schofield Oil Ltd., Box 40, Breslau, Ontario NOB 1MO	5
JAS-065—Active Oil Service, 100 Riverside Avenue, Newark, N.J. 07104	6
JA-010—Angus Tank Cleaning Corp., One Ingham Avenue, Bayonne, N.J. 07002	6
JA-113—Freehold Cartage, Inc., Box 14-5 R.D. No. 5, Freehold, N.J. 07728	8
JA-117—Ken's Marine Service, Inc., 21 Silver Street, Bayonne, N.J. 07002	3
JA-001—Rollins Environmental Services, Inc., P.O. Box 221, Route 322 West Bridgeport, N.J. 08014	11
OH-022—O.H. Materials Co., 16406 Street, Route 224 East, P.O. Box 551, Findlay, Ohio 45840	6
OH-025—Refiners Transport and Terminal Corp., 2700 Transport Road Cleveland, Ohio 44115	15
PA-008—Berks Associates, Inc., P.O. Box 305, Douglassville, Pa. 19518	4
1A-010—Oceanside Equipment Rental Corp., 70 New Street, Oceanside, N.Y. 11572	3
1A-068—Industrial Services, Co., 160 North Oak Street, Copiague, N.Y. 11726	4
8A-018—Eastman Kodak Co., 1669 Lake Avenue, Rochester, N.Y. 14650	116
JA-002—Sanitary Waste Carriers, Inc., 75 Jacobus Avenue, South Kearny, N.J. 07032	32
PA-038—Atlantic Recovery Systems, Inc., P.O. Box 43, Duke Center, Pa. 16729	2
2A-021—City Oil Service of Brooklyn, 3136 Kings Highway, Brooklyn, N.Y. 11234	1
2A-016—Timmes Industrial Maintenance Service, Inc., 15-15 128th Street, College Point, N.Y. 11356	3
4A-003—Capital Hauling Co., 9666 Francis Avenue, Schenectady, N.Y	1
4A-013—Northeast Oil Recycling, 8728 Riverview Street, Stuyvesant, N.Y. 12173	2
CT-018—Connecticut Treatment Corp., 51 Broderick Road, Bristol, Conn. 06010	3
2A-035—A. & L. Service, Corp., 38-40 Review Avenue, New York, N.Y. 11101	1
8A-006—W. M. Spiegel Sons, Inc., 461 East Clinton Street, Elmira, N.Y. 14901	6
9A-142—Cumberland Cooperage Co., Inc., 35 Cumberland Avenue, Buffalo, N.Y. 14220	2
9A-033—Frontenac Environmental Services, Inc., 3136 Buffalo Avenue, Niagara Falls, N.Y. 14303	16
4A-001—Domermuth Petroleum Corp., Box 62, Clarksville, N.Y. 12041	10
JA-084—Peabody Clean Industry, 1400 East Elizabeth Avenue, Linden, N.J. 07036	12
1A-067—Wm. A. Millins Ceaspools Inc., 54 Union Avenue, Ronkonkoma, N.Y. 11779	4
4A-032—A. & A. Oil Recycling Corp., 3266 Taylor Street, Schenectady, N.Y. 12306	2
JA-053—Clean Venture Inc., Foot of South Wood Avenue, Linden, N.J. 07036	6
2A-024—D. Calleia, Inc., 360 Maspeth Avenue, Brooklyn, N.Y. 11211	14
3A-013—Econo Oil, 199 Bronx River Road, Yonkers, N.Y	1
MA-007—Anderson Waste Oil & Chemicals Co., Inc., Box 779 Winslow Cemetery Road, Marshfield, Mass. 02050	4
JA-042—RA-MAR Waste Management Corp., 4 Houvenkopf Road, Mahwah, N.J. 07430	1
2A-037—Manhattan Oil Service, 21-11 A 46 Street, Astoria, N.Y. 11105	1
2A-015—Nassau Tank Cleaning Service, Inc., 321 Nassau Avenue, Brooklyn, N.Y	12
2A-068—Tank Fixers Inc., 360 Maspeth Avenue, Brooklyn, N.Y. 11211	2
3A-001—All County Waste Oil Inc., 57 Brown Place, Harrison, N.Y. 10528	2
3A-067—Marlboro Oil Dist., Mahoney Road, Milton, N.Y. 12547	1
3A-047—Royal Tank Cleaning Corp., 687 South Columbus Avenue, Mount Vernon, N.Y. 10550	6
4A-021—Loeffel Refining Products, Inc., Route 203, Nassau, N.Y. 12123	3
7A-045—C. & J. Oil, 912 Church Street, Syracuse, N.Y. 13212	5
7A-053—Martin Oil Service, R.D. No. 2, Box 40, Parish, N.Y. 13131	1
7A-024—New Era Oil Service, Inc., 402 Parsons Drive, Syracuse, N.Y. 13219	5
7A-048—Sludge Disposal Services, Inc., 209 State Road, Vestal, N.Y. 13850	4

8A-074—C. L. Wellington, Inc., West Street, Box 2, Hornell, N.Y. 14843	1
9A-078—Frontier Chemical Waste Process, Inc., 4626 Royal Avenue, Niagara Falls, N.Y. 14303	36
CT-002—New England Pollution Control, Edgewater Place, Norwalk, Conn. 06855	15
MA-014—Northeast Solvent, 221 Sutton Street, North Andover, Mass. 01845.	5
3A-002—Loeffel's Oil Service, R.D. No. 2, Narrowsburg, N.Y. 12764	3
3A-005—Luzon Oil Company, Inc., P.O. Box 19, Hurleyville N.Y. 12747	3
3a-071—Tam's Waste Oil, 79 West Street, Harrison, N.Y. 10528	1
4A-026—C. & F. Pollution Control Inc., 3266 Taylor Street, Schenectady, N.Y. 12306	3
5A-040—College Oil Recycling, Box 364, Saratoga Springs, N.Y. 12866	1
8A-073—Bausch & Lomb Inc., 1400 North Goodman Street, Rochester, N.Y.	2
1A-033—RGM Liquid Waste Removal Corp., 972 Nicolls Road, Deer Park, N.Y. 11729	5
1A-038—AKBA Waste Oil, 3836 Hahn Avenue, Bethpage, N.Y. 11714	1
1A-004—Rice Tank Cleaning Corp., 434 Suffolk Avenue, Box 296, Central Islip, N.Y. 11722	7
2A-028—Independent Oil Co., 195-07 120th Avenue, St. Albans, N.Y. 11412	3
2A-019—Sid Waste Oil Co., 288 Cooper Street, Brooklyn, N.Y. 11237	3
2A-002—Allied Waste Oil Corp., 88-13 204th Street, Hollis, N.Y. 11423	3
2A-070—A. L. Eastmond & Son Inc., 1175 Leggett Avenue, Bronx, N.Y. 10474	2
3A-015—Rieter Drum & Barrel Company, Inc., 886 North Street, White Plains, N.Y. 10605	3
6A-013—Fourth Coast Pollution Control, Lagrasse Street, Waddington, N.Y. 13694	5
7A-006—Brillo Sewerage Disposal, Coon Hill Road, Skaneateles, N.Y. 13152	8
7A-035—E.W. Ellsworth & Sons Sanitation Service, 219 Mitchell Avenue, Mattydale, N.Y. 13211	2
9A-140—Moog Inc., Seneca and Jamison Roads, East Aurora, N.Y. 14052	1
CT-001—Harbor Petroleum Corp., 15 Lexington Avenue, New Haven, Conn. 06513	6
JA-049—A. M. Environmental Service, Inc., 1031 Market Street, Paterson, N.J. 07543	5
2A-032—East Coast Tank Lining Corp., 700 Hicks Street, Brooklyn, N.Y. 11231	4
2A-073—Filmar Tank Cleaning Co., 107 Sixth Street, Brooklyn, N.Y.	1
2A-013—Tri City Co., 107 Sixth Street, Brooklyn, N.Y. 11231	1
JA-012—DePalma Oil Co., 21 Myrtle Avenue, Jersey City, N.J	2
2A-017—Auchter Industrial Vac Service Inc., 66 Walters Avenue, Staten Island, N.Y. 10301	4
3A-006—Oldover Corp., P.O. Box 437, Mount Marion, N.Y. 12456	1
5A-058—Purdy Oil, Inc., 91 West Main Street, Malone, N.Y. 12953	1
9A-156—General Electric Corp., Harrison Radiator Division, Upper Mountain Road, Lockport, N.Y. 14094	4
1A-021—J.K. Waste Oil, 280 Grand Boulevard, Deer Park, N.Y	2
3A-061—Gene Bianco, 220 Frozen Ridge Road, Newburgh, N.Y.	1
4A-039—Sweet Associates, Inc., 2200 Maxon Road, P.O. Box 2200, Schenectady, N.Y. 12301	7
9A-127—Eugene Kraus Ball Co., 776 Babcock Street, Buffalo, N.Y. 14206	3
CA-002—VTS Trucking, P.O. Box 7978, Long Beach, Calif. 90807	2
CT-016—A. & G. Waste Oil, 22 Murphy's Lane, Shelton, Conn. 06484	2
MA-020—Petroleum Salvage Co. of New England, 443 Merrimac Street, Newburyport, Mass. 01950	1
4A-032—AA Oil Recycling Corp., 266 Taylor Street, Schenectady, N.Y. 12306	2
MA-027—Liquid Waste Specialists, Inc., P.O. Box 85, Auburn, Mass. 01501	2
JA-093—Mid-Atlantic Refinery Services, Inc., 2301 Pennsylvania Avenue, Deptford, N.J. 08096	3
OH-005—Ohio Liquid Disposal Inc., 504 Liberty Street, Fremont, Ohio 43420.	9
PA-003—Colvin Waste Oil Service, 24 Marrer Street, Warren, Pa. 16365	1
1A-052—Certified Waste Oil Co., 320 Court House Road, Franklin Square, N.Y. 11010	1
5A-053—Interstate Oil Service, Box 1250, R.D. No. 2, Gloversville, N.Y. 12078	1
6A-010—E.J. Kupiec Contractor, 724 Lafayette Street, Utica, N.Y. 13502	1

9A-050—Bison Waste Oil Co., South 186 Three Rod Road, Alsen, N.Y. 14004	2
9A-120—Ceramic Specialties Inc., Box 61, R.D. No. 1, Almond, N.Y. 14804	1
1A-030—Frank's Bay City Oil Service, 1117 Olympis Road, North Bellmore, N.Y. 11710	1
2A-008—AAA Oil Pollution Specialist, Inc., 40-10 Crescent Street, Long Island City, N.Y. 11101	5
2A-025—City Waste Oil Service, 70-63 260th Street, Glen Oaks, N.Y. 11004	1
1A-029—General Waste Oil Co., Inc., 37 Longworth Avenue, Dix Hills, N.Y. 11746	2
2A-020—Ace Waste Oil, 7134 58th Avenue, Maspeth, N.J. 11378	1
2A-010—J.W. Lenza Oil Company, 30 Court Street, Staten Island, N.Y. 10304	1
JA-071—All County Environmental Service, P.O. Box G, Glenwood, N.J. 07418	21
JA-022—Robert More Waste Oil, 124 Biltmore Street, North Arlington, N.J. 07032	1
JA-096—Browning Ferris Independent Chemical Services, Inc., Porcupine R., P.O. Drawer C, Pedricktown, N.J. 08067	11
OH-017—Gold Shield Solvents Division, 1410 Chardon Road, Euclid, Ohio 44117	1
9A-056—Booth Oil Co., Inc., 76 Robinson Street, North Tonawanda, N.Y. 14120	12
9A-021—J.C. Brogan Delivery, 450 West Utica, Buffalo, N.Y. 14213	2
9A-077—Southgate Oil Service, Inc., 200 Central Avenue, Buffalo, N.Y. 14206	6
JA-043—Advanced Environmental Technology, 520 Speedwell Avenue, Morris Plains, N.Y. 07950	12
JA-017—Loeffel's Waste Oil Service, Higgins Road, Old Bridge, N.J. 08857	3
JA-027—Ned's Waste Oil, Inc., P.O. Box 375, Newton, N.J. 07860	5
JA-047—D.G. Throckmorton and Sons Trucking Co., Box 149, R.D. No. 1, Glen Gardner, N.J. 08826	2
1A-007—Strebel's Laundry, Inc., 644 Montauk Highway, Westhampton Beach, N.Y. 11978	1
2A-044—Patterson Chemical Co., Inc., 102 Third St., Brooklyn, N.Y. 11231	6
3A-034—Buckner Waste Oil Service, 21 Stonecrest Drive, New Windsor, N.Y. 12550	2
3A-065—Vince's Killmer Excavation, Steel Works Corners, Wassaic, N.Y. 12592	1
6A-008—Sealand Restoration, P.O. Box 2013, Oswego, N.Y. 13126	19
7A-010—Environmental Oil Inc., P.O. Box 315, Syracuse, N.Y. 13209	12
8A-072—Rochester Products—Division of GMC, 500 Sibley Tower, Rochester, N.Y. 14692	4

APPENDIX D.—STATEMENT OF RICHARD H. SCHLOSSEL, PH. D., PRINCETON UNIVERSITY

United States House of Representatives
Committee on Small Business
Subcommittee on Energy, Environment, and Safety

Gentlemen:

I am a chemist with the Princeton University Center for Energy and Environmental Studies currently interested in hazardous materials discharge. For several years I was a Senior Scientist with a major aerospace company where I was responsible for analytical laboratory design and instrumentation. I wish to speak to the question of detection of toxic adulterants to waste oil.

I attended the hearing on waste oil in New York on February 11,1982, but was not able to testify directly because of time constraints. Please include this statement in the record of that hearing.

The possibility of illegal disposing of PCB's and other highly toxic synthetic organic wastes in waste oil was raised in the openning remarks but not referred to in any detail in further testimony. I point out that most of the highly toxic synthetic organic wastes are either chlorinated or brominated materials. While the specific identification of any single contaminant may be a difficult analytical problem, the detection of halogenated organic compounds as a general class is not.

If it were desired to check a sample of waste oil for possible adulteration with these toxic materials, a simple procedure is available. An automated gas chromatograph fitted with pyrolysis input and an electron capture detector would provide an ultra-high sensitivity method for checking samples quickly and inexpensively. I estimate that such an instrument could perform such analyses with a cycle time of five minutes with little monitoring required. The cost of such an instrument is approximately $30,000.00, an amount which could be amortized over almost 100 analyses per 8-hour day for an expected life of 10 years or $1.20/analysis.

If this initial analysis showed the presence of halogenated adulterants, further characterization could be performed to identify it. This quick and inexpensive method would allow the examination of a large number of loads of heating oil for possible adulteration with highly toxic synthetic organic wastes.

Very truly yours,

Richard H. Schlossel

Richard H. Schlossel, Ph. D.

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APPENDIX E.—CORRESPONDENCE BETWEEN NEW YORK OIL HEATING ASSOCIATION, INC., AND ENVIRONMENTAL PROTECTION AGENCY

New York Oil Heating Association, Inc.

NYOHA ASSOCIATION Inc.
"For A Better Industry"

MEMBERS OF:
CREDIT INFORMATION CORPORATION OF NEW YORK
EMPIRE STATE PETROLEUM ASSOCIATION, INC.
NATIONAL OIL JOBBERS COUNCIL
N.Y. CHAMBER OF COMMERCE & INDUSTRY
QUEENS CHAMBER OF COMMERCE

JAMES R. WELLS, *Executive Vice President*

ROBERT R. ROSE, *Chairman of the Board*
STEPHEN J. PATTERSON III, *President*
WALTER KNITTEL, *Vice President*
JOSEPH LOSQUADRO, *Secretary*
RAYMOND HANNEY, *Treasurer*
ARTHUR BIERMAN, *Sgt.-At-Arms*

May 20, 1981

Mr. Julio Morales-Sanchez
Director, Enforcement Division
U.S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

Dear Mr. Morales-Sanchez,

Our Association Counsel, Thomas Mackell, has been in communication with Mr. Walter Mugdan of your agency relative to a problem of great concern to our Association.

As an outgrowth of their conversations, I am writing to you to ask your assistance in combating the problem of the sale and use of reprocessed, nonconforming, or otherwise non-specification fuel oil within the City of New York.

Generally, such product is trucked into New York City from out of state terminals, and to our belief, the sale and burning of the product is in violation of the New York State implementation plan directed by the Federal Clean Air Act.

(Continued......)

A COMPLETELY INTEGRATED TRADE ASSOCIATION REPRESENTING ALL BRANCHES OF THE OIL HEATING INDUSTRY IN THE METROPOLITAN NEW YORK AREA

225 WEST 34TH STREET, SUITE 1202 • NEW YORK, N.Y. 10122 • (212) 695-1380

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We have brought this matter to the attention of the New York City Department of Environmental Protection as far back as November, 1979 (see attached letter from William Cirillo dated November 15, 1979). Our Association met again with Counsel to this city agency in November 1980, and we understand that some random testing of tank loads of fuel oil has been done without any significant findings. We are, of course appreciative of the City's efforts, but we feel that thev lack the manpower, facilities, and funds to do an adequate inspection and policing job.

Thus we are directing our request to you as the appropriate agency to provide a thorough investigation of the quality of certain heating oil products currently offered for sale in the City of New York. We believe that a logical first step in such an investigation would be a meeting among your staff and several of our members who are most directly concerned with this problem and who can provide much background information.

As time is critical in arriving at a solution to the problem, may we hear from you soon as to when we might arrange such a meeting.

Very truly yours,

James R. Wells

James R. Wells
Executive Vice President
ch
enclosures

cc: Mr. Walter Mugdan
Mr. Thomas Mackell, Esq.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10278

JUL 2 1981

James R. Wells
Executive Vice President
New York Oil Heating Association, Inc.
225 West 34th Street
Suite 1202
New York, New York 10122

Dear Mr. Wells:

Thank you for your letter of May 20, 1981. I apologize for the delay in responding. In recent months, we have learned from a number of sources that significant quantities of non-specification fuel oil may be entering the New York City market. We have considered two regulatory areas which might give us some handle on the problem.

As you know, the New York State Implementation Plan, submitted and approved pursuant to the Clean Air Act, includes a regulation prohibiting the sale or use of fuel oil with a sulfur content in excess of 0.3%, by weight, within New York City. The anonymous letter to Mr. Edwin H. Stier which you sent us indicates that a number of firms may be violating this requirement.

If the fuel oil in question is contaminated with any toxic materials, violations of the Resource Conservation and Recovery Act ("RCRA") might also be involved. Certain features of the regulations promulgated pursuant to this Act, however, place unfortunate difficulties upon attempts to prevent such activities.

I have asked Mr. Walter Mugdan of my staff to work with our Air Facilities Branch to determine how we might go about investigating the possibility of sulfur-in-fuel violations. I must advise you that, as you may know, we have in the last year lost a number of our air program staff members whom we have not been able to replace due to budgetary constraints. Investigations such as the one you are suggesting are quite resource-intensive, and may be beyond our means at this time. I will keep you apprised of our actions.

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I have also asked our staff to consider whether or not any enforcement under RCRA is feasible, assuming that some of the fuel oil you are concerned about is contaminated with hazardous wastes. In this connection, it would be helpful if you could provide us with any additional information your members might have concerning evidence of such contamination.

Sincerely yours,

Julio Morales-Sanchez
Director
Enforcement Division

cc: Thomas J. Mackell, Esq.
Mackell & Robertson

APPENDIX F.—"ANALYSIS OF POTENTIAL USED OIL RECOVERY FROM INDIVIDUALS," REPORT PREPARED FOR THE DEPARTMENT OF ENERGY

FOSSIL ENERGY

DOE/BC/10053-21

ANALYSIS OF POTENTIAL USED OIL RECOVERY FROM INDIVIDUALS

Final Report

Work Performed for the Department of Energy
Under Contract No. DE-AC19-79BC10053

Date Published–July 1981

Market Facts, Inc.
Chicago, Illinois

U. S. DEPARTMENT OF ENERGY

I. EXECUTIVE SUMMARY

A. Introduction

To assist the Department of Energy in its investigation of methods for recycling used motor oil, Market Facts conducted a telephone survey of individuals who change their own motor oil. The study examined the amount of oil used, oil change practices, oil disposal methods, and perceptions and attitudes toward used motor oil disposal and oil recycling

A national probability sample of 4,805 telephone households in the contiguous continental United States was used for this study. The survey identified vehicle households as well as households where at least one member changed the oil in a motor vehicle within the last 12 months.

B. The National Motor Oil Market

Of the 79.6 million households in the contiguous continental United States, 85 percent own, lease, or operate a motor vehicle that is available to a licensed driver on a regular basis. Of al *vehicle* households, 55 percent are do-it-yourself (DIY) oil change households where, during the past 12 months, one or more household members personally changed the motor oil of a household vehicle. (These DIY households represent 47 percent of *all* U.S. households.)

1. National Vehicle Use

The average number of vehicles in DIY households is 2.3, as contrasted with 1.6 vehicles in non-DIY households. The average number of miles driven annually is 26,000 in DIY households, with an average of 11,000 miles driven *per vehicle* for both DIY and non-DIY households.

2. Motor Oil Consumption

Almost three quarters of one billion (745 million) gallons of motor oil are consumed in American vehicle households annually: almost 80 percent in oil changes and the remainder in oil added between changes. After use, 73 percent is drained from crankcases during oil changes; the remainder is burned or leaked. DIY households account for two-thirds of oil consumed and two-thirds of oil drained from crankcases.

Note: As will be discussed in Section III.A.2., the amount of oil drained per oil change is derived from responses to questions 3d, 3e, and 17a.

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3. Geographic Variation

Vehicle households as a percentage of all households range from 80 percent in the Northeast to 89 percent in the North Central and West census regions. (A census map is provided in Appendix C.) The number of vehicles per vehicle household ranges from 1.8 in the Northeast to 2.1 in the West. For vehicle households with DIY oil changers, the range is 2.1 vehicles per household in the Northeast to 2.4 in the West region. The annual miles per vehicle and the annual miles per household show relatively little or no regional variation. Nevertheless, the South census region accounts for almost one-third of all DIY oil drained for oil changes.

Each census region contains two or three census divisions. Geographic variation is even more pronounced at the division level. Vehicle households as a percentage of all households range from 95 percent in the Mountain census division to 76 percent in the Middle Atlantic division. The two census divisions which account for the greatest share of used DIY oil are the East North Central and Pacific divisions. Together theses divisions account for 37 percent of all DIY oil drained for changes.

C. DIY Oil Change Practices

The following findings are based on the responses of the household member who is actually involved in changing the motor oil.

1. Frequency of Oil Changes

The average time elapsed between oil changes is 4.2 months, and the average number of miles driven is about 3,860. The number of oil changes per year for the vehicle changed most recently in DIY households is 3.8 (only slightly higher than the estimate obtained from the screening interview.)

2. Oil Change Behavior

Most respondents record the mileage and/or the date when they change their oil. The most common location for an oil change was the driveway. An open container is usually used for draining oil, but for disposal, about a quarter of the DIYs transfer the oil to another container.

3. Methods by Which DIYs Dispose of Used Motor Oil

Respondents identified numerous and varied ways for disposing of used motor oil. Forty percent used methods that result in the oil eventually being poured on the ground. If oil collected with the trash is taken to a landfill or dump, this percentage (oil poured on the

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ground) is actually greater than 40 percent. (Twenty-one percent put oil in with the trash to be collected.) About 14 percent of the respondents recycle oil or take it to a gas station to be added to the used oil drum. Eight percent use oil on machinery, and the remainder include a variety of uses for the oil.

There appear to be some regional variations in disposal method. In rural areas pouring oil on a road is the most common disposal method. In non-rural areas the most common method of disposal is to put oil in with the trash to be collected.

4. Motor Oil Purchase Patterns of Do-It-Yourselfers (DIYs)

a. National Purchase Patterns

Department or discount stores are the primary outlets for DIY motor oil purchases (about one-half of the respondents usually buy oil at these outlets). Another 26 percent usually purchase oil from automotive parts or supply stores.

About one-third of the DIYs purchase 24 quarts of oil at one time. Twenty-three percent buy five quarts at a time. Almost all DIYs buy oil in one-quart containers.

b. Geographic Purchase Variations

Department and discount stores appear to be less important in the West, particularly in the Mountain region, than they are elsewhere. Automotive parts and supply stores are substantially more important in the Pacific division.

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D. Attitudes toward Oil Disposal and Recycling Used Motor Oil

Most respondents feel that pouring oil down a storm sewer is very harmful. Only one-third think that burying used oil in the ground is very harmful to the environment.

More than two-thirds of all respondents reported that they have seen or heard something about recycling used motor oil. These respondents were about three times more likely to dispose of used oil by taking it to a gas station or by giving the oil away for recycling. They were also more likely to view certain methods of oil disposal as "very harmful" to the environment. Nevertheless, past exposure to information about recycling used motor oil does not appear to have influenced:

- perceptions of how good recycled oil would be for use in respondents' cars,
- perceptions of how much energy would be saved by recycling oil,
- intentions to recycle oil under various circumstances.

The overall perception of recycled motor oil is that it would not be as good as new motor oil for use in DIYs' cars. DIY willingness to bring used oil in for recycling appears to be related to perceptions of how good recycled oil would be for their own use. Respondents who feel that recycled motor oil is just as good or better than new oil appear to be consistently more willing to bring used oil in for recycling. Respondents who feel that recycled oil is "not at all as good" as new oil are more than twice as likely *never* to bring in used oil for recycling.

Almost all respondents said they think that energy can be saved by recycling used motor oil. More than two fifths think "a great deal" of energy can be saved in this manner. Respondents' perceptions of the amount of energy saved are somewhat related to their impressions of the quality of recycled motor oil.

DIYs, for the most part, report a willingness to save used oil for recycling. About 70 percent said they would *always* save oil for recycling if the oil were picked up at their house. More than half said they would always save used oil if they could take the oil to a convenient place. Non-rural DIYs are more likely than are rural DIYs to bring in used oil for recycling. This may be due to the fact that about 50 percent of DIYs in rural areas use their used motor oil for roads, machinery, insects, weeds, and so forth.

Motivators and Incentives to Recycling Motor Oil

An objective of the survey was to determine whether statements regarding the ability of oil recycling to reduce environmental pollution and/or imports of foreign oil would have any effect on DIY responses. In addition, two incentive payment amounts, 5 cents and 15 cents per quart, were tested. The survey responses indicate that neither the statements nor the level of payment tested appeared to affect a respondent's expression of willingness to return used motor oil for recycling.

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APPENDIX G.—PREPARED STATEMENT OF NORMAN H. NOSENCHUCK, P.E., DIRECTOR, DIVISION OF SOLID WASTE, DEPARTMENT OF ENVIRONMENTAL CONSERVATION, STATE OF NEW YORK

Legislation concerning used oil recovery was first enacted into law in New York State on August 7, 1978 as Chapter 740 of the Laws of 1978.

The principal objective of this legislation is to keep used oil off the land and out of water supplies and to return a valuable resource to productive use.

This legislation included five main elements which are briefly described below:

1. A new Title 23 (Re-refining of Used Oil) was added to the New York State Environmental Conservation Law. Significant provisions include the following:

A. All State and local officials shall act within their authority to encourage the use of re-refined or reprocessed oil.

B. Effective September 1, 1979 every person, service establishment, industrial operation, airport, trucking terminal, State of local government facility generating at least 500 gallons per year of used oil must provide and maintain used oil retention facilities which must be periodically emptied by registered industrial waste scavengers.

C. DEC may promulgate rules and regulations defining proper design and maintenance of used oil retention facilities.

D. DEC may direct the delivery of used oil by industrial waste scavengers to refiners.

E. Every service establishment is required to accept at no additional charge used oil in quantities not exceeding 5 gallons per day from any individual.

F. All used oil collectors and re-refiners are required to maintain complete and adequate records.

G. The Commissioner of Environmental Conservation in consultation with the Commissioners of the State Energy Office and the Department of Transportation shall submit a report to the Governor and the Legislature, not later than April 1 of each year, regarding the reclamation, re-refining and reuse of used oil in New York State.

2. Title 22 of the Environmental Conservation Law is amended to provide administrative and civil sanctions for violations of Title 23.

3. The State Energy Office is required to implement a public information program to inform public and private sectors of the State as to the merits of re-refined oil and to promote petroleum resource conservation, recovery and reuse by industry and the general public.

4. The General Business Law is amended to clarify labeling requirements for refined oil and to require that all containers of lubricating oils intended for sale in New York State bear a notice which warns of improper disposal of used oil and encourages the return of used oil to a retention or recycling facility.

5. The Highway Law is amended to require the Commissioner of the Department of Transportation to promulgate standards for the use of used oil for dust control.

We have produced two annual used oil reports which were very well received, not only in New York State but across the Nation as well. Additional State resources are needed to continue this activity.

The National Association of States Oil Recovery Coordinators decided to use the format of our first annual used oil report as a model to be emulated in other State used oil programs.

Recently promulgated regulations, Part 360 (Solid Waste Management Facilities) of Title 6 of the Official Compilation of Codes, Rules and Regulations, set specific standards for waste oil facilities. A permit will be required to construct or operate a waste oil storage, reprocessing, or re-refining facility. Such facilities must be designed, constructed and operated in accordance with the New York State Building Construction Code or applicable local Building and Fire Codes. No permit is required for used oil retention facilities; however, such facilities must be designed, constructed, and operated in accordance with the New York State Building Construction Code or applicable local Building and Fire codes. Additional provisions reiterate requirements of Chapter 740 of the Laws of 1978.

In addition, the hazards presented by road oiling with used oil were significantly reduced by regulations promulgated by the New York State Department of Transportation. Effective September 1, 1979, Part 161 of Title 17 of the Official Compilation of Codes, Rules and Regulations of New York State prohibited the use of either new or used oil for dust control. A clear exception was made to permit the use of emulsified or cutback asphalt in what is commonly known as "oil and stone" treatment.

The New York State Department of Environmental Conservation is now in the process of developing regulations governing air emissions from burning used oil as a fuel.

Efforts to properly enforce our existing used oil legislation have been seriously hampered by the lack of program staff and resources, not only at the Department of Environmental Conservation but at the State Energy Office as well.

The enactment on October 15, 1980 of the Federal Used Oil Recycling Act of 1980 (Public Law 96-463) provided a strong ray of hope that the Federal Government would assume a significant leadership role in used oil recycling. This Federal legislation incorporated much of our State used oil legislation and promised to provide both technical and financial assistance to the States. Unfortunately, no funds were ever appropriated for the authorization of $5 million in each of Federal fiscal years 1982 and 1983. In addition, the Federal Government appears to have withdrawn completely from the field of used oil recycling. This is unfortunate. Federal funds should be made available to the States for State used oil recovery programs.

The present hearing on waste oil recovery requests our views on recovery levels and what can or should be done to approve them, and the economic, environmental, and legal factors affecting the choice of recovery methods. The remainder of this position paper will address these two basic issues.

RECOVERY LEVELS

Based on available data, the New York State Energy Office has estimated that 56,304,000 gallons of automotive lubricants and 44,262,000 gallons of general industrial lubricants were sold in New York State in 1980. Assuming recovery factors of 64 percent for automotive lubricants and 31 percent for industrial lubricants, 36,034, 560 gallons of automotive lubricants and 13,721,220 gallons of industrial lubricants or a total of 49,755,780 gallons of used oil should have been available for collection by used oil haulers in 1980.

Past experience has shown that approximately 25 percent of the used oil available for recovery is never accounted for. Much of this is the result of "do-it-yourself" oil changers; and this oil may even have been disposed of in the sewer, the garbage can or may have been dumped indiscriminately on the land. A certain amount may also have been used in road oiling for dust control.

To increase these recovery levels, both the State and the Federal Governments must be actively involved in used oil recovery and recycling and must be willing to commit necessary program resources to develop and maintain used oil recycling programs.

Governmental efforts should be directed toward increasing the recovery level from "do-it-yourself" oil changers and developing economic incentives to increase used oil recovery and recycling.

RECOVERY METHODS

In New York State, the only legally permissible methods of used oil recycling are reprocessing for use as a fuel and re-refining into new lubricating oil base stock. The preferred method is re-refining since there is no limit to the number of times oil may be re-refined and reused. However, currently there is a quicker profit to be made by reprocessing into a fuel oil.

The cost of reprocessing used oil to be burned as a fuel is significantly less than the cost of re-refining used oil to produce a lubricating oil feedstock. Also, the cost of transporting used oil to geographically widespread re-refiners is much higher than the cost of transporting to a local fuel user. Consequently, reprocessors or fuel users can generally afford to pay a higher price for used oil than re-refiners. This margin is made even wider if fuel oil users are able to escape the costs of reprocessing or emission controls by burning unprocessed used oil without adequate air pollution control equipment.

Problems inherent in the re-refining industry stem from the fact that it is a relatively small industry which generally still employs an old process technology and which is quite sensitive to economic fluctuations.

The most commonly employed re-refining process is the acid/clay treatment process which has relatively high operating costs and which produces a toxic by-product in the form of acid sludge which poses difficult disposal problems. Vacuum distillation techniques, which are more environmentally acceptable, are beginning to find commercial application in this country. This type of technology produces by-products which are much less harmful and should be easier to develop alternate uses for than acid sludge produced by the acid/clay treatment process.

Although acid sludges can be treated to neutralize them, they will still contain all the toxic contaminants removed from the used oil. Consequently, even neutralized sludges will still present serious economic and environmental disposal problems.

The immediate prospects for increased re-refining or reprocessing in New York State remain limited by the lack of adequate re-refining and reprocessing capacity. Because of inadequate capacity, significant amounts of the used oil generated in New York State are shipped out of State for processing. The lack of adequate re-refining and reprocessing capacity tends to drive a valuable resource from the State.

More work must be done by both the State and the Federal Government to improve the opportunities for recycling used oil. This work must involve investigating alternative methods of assisting re-refiners and reprocessors to more effectively treat and dispose of by-product sludges and to encourage the replacement of old technologies with newer, more environmentally acceptable processes.

The competitive position and prospects for re-refining will be improved and the possibility of indiscriminate burning will be reduced by increasing the regulation of the end use of used oil and improving controls over burning used oil to ensure that used oil is properly processed prior to burning and that adequate emission controls are employed in the combusting unit.

We appreciate the opportunity to present our views to you on this very important subject.

APPENDIX H.—CORRESPONDENCE BETWEEN CHAIRMAN BEDELL AND THE ENVIRONMENTAL PROTECTION AGENCY

BERKLEY BEDELL, IOWA
CHAIRMAN

NICHOLAS MAVROULES, MASS.
CHARLES HATCHER, GA.
DENNIS E. ECKART, OHIO

SILVIO O. CONTE, MASS.
JOHN HILER, IND.
GUY V. MOLINARI, N.Y.

[illegible]
SUBCOMMITTEE STAFF DIRECTOR
[illegible]

JAMES M. [illegible]
MINORITY SUBCOMMITTEE COUNSEL
[illegible]

United States House of Representatives
Committee on Small Business
Subcommittee on Energy, Environment, and
Safety Issues Affecting Small Business
B-363 Rayburn House Office Building
Washington, D.C. 20515

February 22, 1982

Hon. Anne M. Gorsuch
Administrator
Environmental Protection Agency
401 M Street, SW
Washington D.C., 20460

Dear Ms. Gorsuch:

On February 11 the Energy, Environment and Safety Subcommittee of the House Small Business Committee held a field hearing in New York City to examine the subject of waste oil recovery. A representative of the Environmental Protection Agency was present and participated in the hearing, which we do appreciate.

On behalf of the Subcommittee, I wish to convey to you personally certain concerns we have regarding EPA's role in assuring that used motor oils and lubricants are recycled or disposed of in a safe and efficient manner. As you know, your Agency has been given statutory authority to act in this area.

At our hearing, representatives from several different industries all told us that they want EPA to issue regulations concerning waste oil recovery. Small businessmen in the heating oil business, for instance, say they are being harmed by illegitimate operators who are selling contaminated waste oil. And representatives of the re-refining and lubricant manufacturing industries told us that the absence of federal regulations has created uncertainties in their industries and caused delays in investments.

Representatives of city and state government enforcement agencies told the Subcommittee that the problem of waste oil disposal is interstate in nature and must be addressed in a coherent fashion at the federal level. Moreover, they noted that local enforcement efforts are impeded while the local agencies await the development of standards and measures by the EPA.

As you know, the EPA was required to have issued waste oil regulations by October 1981. Those regulations have not yet been issued and the Subcommittee is not assured by your representative's assertion that the regulations will be forthcoming "in several months."

First, we are aware of the recent change in personnel who are working on the regulations. While we have no reason to question the ability and integrity of the new staff assigned to waste oil regulations, we do note that the turnover must inevitably result in further delays.

Second, and by far the more important point, we understand that the Department of Energy is about to close down its Bartlesville, Oklahoma, research facility where a great deal of important work is done in the waste oil recovery field. We believe such a move will have a negative effect on EPA's efforts to develop standards and regulations.

The statement submitted to the Subcommittee on February 11 by EPA's Office of Solid Waste Management noted:

> With our cooperation, the Department of Energy is beginning tests of emissions from burning contaminated oils in boilers, as well as evaluations of other waste oil uses such as road oiling, rerefining, and reprocessing, to determine the fate of contaminants as they move through these processes.

In a separate statement from EPA's regional personnel, we were told:

> EPA will be relying on a U.S. Department of Energy (DOE) study now underway as well as our own testing program to determine hazardous waste combustion characteristics and by-products.
> The DOE testing involves collection of actual waste oil samples from collectors, reprocessors, and rerefiners and analysis of the constituents of the samples collected to determine whether toxic contaminants are present and what they are. The waste oil samples will be burned in different kinds of boilers and space heaters and put through tests simulating other uses and disposal methods such as road oiling, disposal into sewage treatment systems, and rerefining/reprocessing to see what actually happens to contaminants....
> We expect that these testing programs will give us the data and information we need to develop a reasonable regulatory scheme for waste oils that sets standards tailored to the waste oils problem to address the specific health and environmental risks posed by this waste stream.

Thus, you can see why we are concerned by news that DOE's Bartlesville facility, where all of the above-mentioned work is done, will be shut down very soon. Consequently, the Subcommittee would like to know what impact the closing of the Bartlesville facility is likely to have on EPA's ability to fulfill its commitments in the waste oil area and what steps, if any, your Agency will take to compensate for the loss of the Bartlesville facility. We also would like to know specifically of any consultations that may have taken place between EPA and DOE prior to the decision to close the Bartlesville research facility.

In a separate but related matter, the Subcommittee is interested in knowing the status of your Agency's study of space heating units

(continued)

that are fueled by waste oil. Our hearing record includes advertising materials promoting several brands of "waste oil heaters," primarily for use in gasoline station service bays it appears.

We understand some questions have been raised about the safety of these devices and that the EPA is studying this matter. Any information your agency can provide the Subcommittee would be helpful to us.

To summarize, we would like to receive specific answers to the following questions that arise from our recent hearing.

1. When will final regulations be issued by EPA regarding the handling and disposal of waste oil?
2. What impact will the closing of the DOE's Bartlesville, OK., facility have on EPA's waste oil programs?
3. What steps, if any, does EPA plan to take to compensate for the effects of the Bartlesville facility being closed?
4. What consultations, if any, took place between EPA and DOE prior to the decision to close the Bartlesville research facility?
5. What can EPA tell us now about the safety of small waste oil heaters and what is the status of its research in this area?

Your prompt reply to these questions will be appreciated, as we would like to include your response in our hearing record. If it would expedite matters any, please feel free to address the question about waste oil heaters in separate correspondence from your reply to our inquiries about the Bartlesville facility and EPA's efforts to promulgate regulations.

Thank you for your cooperation.

Sincerely,

BERKLEY BEDELL
Chairman

BB/mhr
cc: Hon. Guy Molinari

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

APR 9 1982

THE ADMINISTRATOR

Honorable Berkley Bedell
Chairman, Subcommittee on Energy,
Environment, Safety, and Issues
  Affecting Small Business
Committee on Small Business
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

Thank you for your letters of February 22 and March 19 concerning the regulation of waste oil as a hazardous waste. We fully appreciate the concerns of the Subcommittee. The delay in this response to your initial letter is due, in large part, to the complexity of this issue. Please accept my apologies. I assure you that we are devoting the resources and the attention this important issue demands.

In response to your specific questions I should first state that the Agency probably will not propose a waste oil regulation until the summer of next year, 1983. As the Agency indicated in its testimony written for the Subcommittee's field hearing in New York City on February 11, the development of a responsible regulation of waste oil is an extremely complex task and must be based on firm scientific data. Necessary new and better information we will be obtaining during the next year will make it possible for the Agency to write a sound waste oil regulation.

Your second and third questions concerned the impacts of the possible closing of the Department of Energy (DOE) laboratory in Bartlesville, Oklahoma. It is true that EPA intends to use information being developed through a contract funded by the DOE Bartlesville lab to evaluate the human health and environmental consequences of burning and treating waste oil. The closing of this laboratory and, even more importantly, the cancelling of the contract with GCA Technology, may leave important work not completed. However, GCA has already completed much useful work; specifically, chemical analysis of 16 waste oil samples and one waste oil test burn in a boiler. Should DOE close the Bartlesville lab before the contract is completed, EPA will then make a decision on whether to fund the remaining work. In the meantime, EPA is planning to fund additional research on waste oil environmental impacts. In any case, while the work funded through DOE's Bartlesville facility has been a great value to EPA, we will not let the possible closing of the facility interfere with our development of a sound waste oil regulatory program.

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Your fourth question concerned consultations between EPA and DOE regarding the closing the Bartlesville laboratory. After DOE made the decision to close the facility, DOE and OSW staffs consulted on a number of occasions to explore ways of keeping the GCA project alive, regardless of the fate of the Bartlesville laboratory. The possibility for EPA adding funds to the GCA contract was discussed, but DOE indicated that--due to the uncertainty surrounding the status of contracts administered through a facility on the verge of closing--it would be advisable for EPA to make separate contractual arrangements with GCA. EPA is currently exploring this possibility and continues to consult with DOE on this matter.

In response to your final question concerning the safety of small waste oil heaters, EPA's Office of Research and Development has recently completed a study of air emissions from these units. The study compared two popular types, one being an "atomizer" unit and one being a "vaporizer" unit. The draft report is now being reviewed for scientific validity. However, I can provide you with some preliminary conclusions. First, both types of units do emit many of the metals found in waste oil. The atomizer unit, which burns an oil spray, emits significantly more metals than the vaporizer unit, which burns vaporized oil. Samples taken at the exhaust stack show concentrations of metals, particularly lead, in the stack gas that are higher than the concentrations recommended for workplace ambient air. However, conclusions about the risk to individuals cannot be drawn without further analysis. The actual health risk posed by the operation of these units depends on many factors--including the amount and composition of waste oil burned, the dispersion of the metals, and the proximity of the stack to exposed workers or nearby residences. DOE plans to conduct further tests with these units, at GCA's facility.

EPA is currently considering how to assess risks from these units. Air pollution models commonly used today were developed for much larger units, and the Agency is not sure those units are appropriate to use to evaluate small units. EPA has been in contact with the National Institute of Occupational Safety and Health (NIOSH) which has had more experience in evaluating this type of hazard. When more data are available, EPA will also make this information available to the Consumer Product Safety Commission (CPSC).

I hope you will find this to be responsive to your inquiries. If I can be of any further assistance, please let me know.

Sincerely yours,

Anne M. Gorsuch

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APPENDIX I.—CORRESPONDENCE BETWEEN CHAIRMAN BEDELL AND THE DEPARTMENT OF ENERGY, REGARDING WASTE OIL RECOVERY RESEARCH DONE AT BARTELSVILLE, OKLA.

BERKLEY BEDELL, IOWA
CHAIRMAN

NICHOLAS MAVROULES, MASS.
CHARLES HATCHER, GA.
DENNIS E. ECKART, OHIO

United States House of Representatives
Committee on Small Business
Subcommittee on Energy, Environment, and
Safety Issues Affecting Small Business
B-363 Rayburn House Office Building
Washington, D.C. 20515

SILVIO O. CONTE, MASS.
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SUBCOMMITTEE STAFF DIRECTOR
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JAMES M. [illegible]
MINORITY SUBCOMMITTEE COUNSEL
202-225-[illegible]

February 18, 1982

Hon. Jan Mares
Assistant Secretary-Fossil Fuel
Department of Energy
Washington, D.C. 20585

Dear Mr. Mares:

Last week in New York City the House Small Business Committee's Subcommittee on Energy and Environment held a hearing on the subject of waste oil recovery. I am writing to you to convey the Subcommittee's concern over certain information that came out at that hearing.

Reflecting the concern we have heard from all relevant portions of private industry, the Subcommittee desires to see the Environmental Protection Agency fulfill its statutory requirement to develop standards and regulations for the proper handling of used motor oil, industrial lubricants and other waste oils. The Agency's failure to do so thus far has greatly frustrated those in the business community who wish to move forward with waste oil recovery. According to our witnesses last week, it also has stymied state and local government agencies who say they are looking to EPA to provide leadership in addressing this national problem.

Several of our witnesses praised the research work the Department of Energy has done in the area of waste oil recovery. Representatives of the re-refining and lubricant manufacturing industries told us that the DOE's research activity has been very helpful in advancing the technology used in their industries and that such advances would not have been likely without the DOE's involvement.

Similarly, we received two different statements from the EPA last week, both attesting to the importance of the work you are doing. A statement from EPA's Office of Solid Waste in Washington says:

> With our cooperation, the Department of Energy is beginning tests of emissions from burning contaminated oils in boilers, as well as evaluations of other waste oil uses such as road oiling, rerefining, and reprocessing, to determine the fate of contaminants as they move through these processes.

In a separate statement, EPA's acting regional administrator told the Subcommittee:

(continued)

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> EPA will be relying on a U.S. Department of Energy (DOE) study now underway as well as our own testing program to determine hazardous waste combustion characteristics and by-products.
>
> The DOE testing involves collection of actual waste oil samples from collectors, reprocessors, and rerefiners and analysis of the constituents of the samples collected to determine whether toxic contaminants are present and what they are. The waste oil samples will be burned in different kinds of boilers and space heaters and put through tests simulating other uses and disposal methods such as road oiling, disposal into sewage treatment systems, and rerefining/reprocessing to see what actually happens to the contaminants....
>
> We expect that these testing programs will give us the data and information we need to develop a reasonable regulatory scheme for waste oils that sets standards tailored to the waste oils problem to address the specific health and environmental risks posed by this waste stream.

Given this information, we are, of course, concerned by reports that the Department of Energy is preparing to close down its research facility at Bartlesville, Oklahoma, where all of the Department's work in waste oil recovery is done. It also is greatly disturbing to us to see that the Environmental Protection Agency appears to be unaware that your most recent budget submission includes the shutdown of a research program that agency says it is relying upon.

The Subcommittee would like to know precisely what the DOE's plans are for its waste oil recovery research program and how that program will be carried on if and when the Bartlesville facility is closed. In addition, we would like to know what, if any, consultation DOE had with EPA prior to the decision to close down the waste oil recovery work being done at Bartlesville.

Your prompt response to this inquiry would be appreciated, as we would like to include it in our hearing record. Thank you.

Sincerely,

BERKLEY BEDELL
Chairman

BB/mhr
cc: Hon. Guy Molinari
Hon. James Jones

THE SECRETARY OF ENERGY
WASHINGTON, D.C. 20585

March 31, 1982

Honorable Berkley Bedell
Chairman, Subcommittee on Energy, Environment,
  and Safety Issues Affecting Small Business
Committee on Small Business
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Thank you for your letters of February 18 and March 19, 1982, regarding the Department's work in the area of waste oil recovery. We appreciate the interest you and your Subcommittee on Energy and Environment have expressed in the used oil recycling research which has been performed at the Department of Energy's Bartlesville Energy Technology Center (BETC) and apologize for the delay in responding to your request.

Currently, they have several activities ongoing in the used oil recycling project. The one referred to by the Environmental Protection Agency (EPA) at your hearings involves determining the fate of hazardous and nonhazardous wastes in a variety of oil recycling scenarios. We understand scientists at EPA and the National Bureau of Standards have been in frequent contact with their counterparts at BETC throughout this project to insure its usefulness. As the EPA Acting Regional Administrator suggested, the resulting data will be a significant factor in their deliberations on regulating used oil as a hazardous waste.

There have been discussions with EPA on the possibility that budget and manpower reductions would force the closing of BETC. Because of their extensive past use of our laboratory for fuels/engines/emissions research, we did discuss the feasibility of EPA taking over our facility. However, EPA declined for the same budgetary reasons. We will continue all research related to hazardous and nonhazardous wastes in used oil re-refining until the end of FY 1982 and provide results of that research to EPA and other interested parties. Continuation of this work beyond FY 1982 is uncertain due to the proposed restructuring of the Fossil Energy field organization and federal budget constraints in FY 1983.

As plans are developed and decisions made concerning the waste oil recovery research program, you can be assured that your office will be kept fully informed.

Sincerely,

James B. Edwards

James B. Edwards

cc: Honorable Joseph M. McDade
    Ranking Minority Member

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APPENDIX J.—"USED OIL REPORT" FROM NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

Robert F. Flacke
Commissioner

JUN 09 1982

Honorable Berkley Bedell
US House of Representatives
Committee on Small Business
Subcommittee on Energy, Environment, and
Safety Issues Affecting Small Business
B-363 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Bedell:

Enclosed for your information is a copy of our Third Used Oil Report which I referred to in my position paper prepared for your February 11 hearing on used oil recycling.

The Third Used Oil Report addresses in some detail the problems caused by the failure of both the Congress and the New York State Legislature to provide adequate used oil legislation or to provide funding for existing legislation.

A small supply of this report for use by your Subcommittee members is also enclosed.

Sincerely,

Norman H. Nosenchuck, P.E.
Director
Division of Solid Waste

Enclosures

STATE OF NEW YORK
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233

ROBERT F. FLACKE
COMMISSIONER

MAY 18 1982

TO: The Honorable Hugh Carey
Governor

The Honorable Stanley Fink
Speaker of the Assembly

The Honorable Warren Anderson
Majority Leader of the Senate

Members of the New York State Legislature

Pursuant to Section 23-2311 of the Environmental Conservation Law as enacted by Chapter 740 of the Laws of New York, 1978, I hereby submit the attached Third Report to the Governor and the Legislature on the Reclamation, Rerefining and Reuse of Used Oil in New York State.

This Third Report describes the current state of implementation of this legislation, which was signed into law on August 7, 1978, as well as the potential benefits to be realized if the State's Used Oil Program is fully implemented.

Robert F Flacke

Robert F. Flacke
Commissioner

Attachment

RECLAMATION, REREFINING AND REUSE OF USED OILS

A REPORT

by the

New York State Department of Environmental Conservation

for the

Governor and the Legislature of the State of New York

Robert F. Flacke
Commissioner

April , 1982

THIRD REPORT TO THE GOVERNOR AND THE LEGISLATURE ON THE RECLAMATION, REREFINING AND REUSE OF USED OILS

EXECUTIVE SUMMARY

This report has been prepared pursuant to Section 23-2311 of the Environmental Conservation Law as enacted by Chapter 740 of the Laws of New York, 1978.

In 1981, the Department of Environmental Conservation (DEC) hoped to prepare and submit the Third Annual Used Oil Report. However, DEC still has not received any appropriations to permit proper administration of a Used Oil Program which is so important to our energy and conservation needs. Therefore, severe shortages of staff and other program resources precluded DEC from preparing the report mandated by Chapter 740.

The DEC budgetary situation is even more bleak this year and the Used Oil Program remains unfunded.

In a final effort to present the Governor and the Legislature with an accurate assessment of the current state of used oil problems and recycling opportunities, DEC has prepared this report. Unless DEC receives additional funds to implement Chapter 740 it is unlikely that additional reports will be prepared.

With the enactment of Chapter 740, New York State became a leader in attempts to keep used oil off the land and out of water supplies and to return a valuable resource to productive use.

Each year approximately 100 million gallons per year of lubricating oils are sold in New York State. Nearly 50 million gallons of used oil should be available each year for recycling and reuse.

Used oil recycling in this State suffers from a number of serious problems including:

1. Substantial amounts of used oil are improperly disposed of by means which contaminate our air, land and water supplies.
2. From a purely economic viewpoint, it is cheaper to burn used oil as a fuel and use it only once than to rerefine it an unlimited number of times into a new lubricating oil basestock.
3. The contaminants normally found in used oil can cause serious air quality problems if burned as a fuel without adequate reprocessing to remove contaminants or without proper air pollution control equipment.
4. It has become relatively easy and highly profitable for unscrupulous firms to add toxic and hazardous wastes such as polychlorinated biphenyls (PCBs) and industrial solvents to used oil and then sell this deadly mixture as a fuel.
5. At present Chapter 740 is unfunded and no DEC programs exist to stimulate environmentally sound recovery and reuse of used oils and to monitor and regulate the safe handling and use of used oils.
6. The federal government has abdicated its role in used oil recycling. The U.S. Environmental Protection Agency, the Department of Energy and the U.S. Department

of Commerce either have terminated or are in the process of terminating all involvement in used oil recycling. In addition the federal Used Oil Recycling Act of 1980 (Public Law 96-463) remains unimplemented and has not provided any of the promised technical and financial assistance to State Used Oil Programs.

If the State Legislature is unable to appropriate sufficient funds, DEC believes that Chapter 740 could be properly financed and implemented through the initiation of a fee system which would charge a minimal fee for each gallon of lubricating oil sold in New York State. For example, a one cent per gallon fee applied to the approximately 100 million gallons of lubricating oil sold each year in this State, would generate approximately $1,000,000 per year to support used oil programs.

The immediate prospects for increased rerefining or reprocessing in New York State remain limited by the lack of adequate rerefining and reprocessing capacity. Because of inadequate capacity, significant amounts of the used oil generated in New York State are shipped out of state for processing. The lack of adequate rerefining and reprocessing capacity tends to drive a valuable resource from the state. DEC is also finding that the used oil driven from the State often returns as fuel contaminated with hazardous wastes.

More work must be done by both the State and the Federal Government to improve the opportunities for recycling used oil.

This work must involve investigating alternative methods of assisting rerefiners and reprocessors to more effectively treat and dispose of by-product sludges and to encourage the replacement of old technologies with newer, more environmentally acceptable processes.

The competitive position and prospects for rerefining will be improved and the possibility of indiscriminate burning will be reduced by increasing the regulation of the end use of used oil and improving controls over burning used oil to ensure that used oil is properly processed prior to burning and that adequate emission controls are employed in the combusting unit.

Both the State Legislature and the U.S. Congress have failed to provide adequate legislation including inspection procedures and the manpower necessary to ensure the safe recycling or reuse of used oils and environmentally sound disposal of toxic or hazardous by-products of used oil recycling.

Tougher laws by themselves will not solve these problems unless the environmental agencies such as DEC are given the funds necessary not only for adequate inspection and monitoring, but more importantly to implement the good legislation such as Chapter 740 which already exists.

Congress and the State Legislature must recognize that by failing to provide adequate legislation or by failing to provide funding for existing legislation, there will be no State used oil programs, this State and the nation will continue to waste a valuable resource, and our air and water resources will continue to suffer serious degradation from improper disposal or recycling of used oil.

Unless DEC receives sufficient financial support to develop a used oil program, it is unlikely that additional reports will be prepared, and Chapter 740 will not be properly implemented.

THIRD REPORT TO THE GOVERNOR AND THE LEGISLATURE ON THE RECLAMATION, REREFINING AND REUSE OF USED OILS

Pursuant to Secion 23-2311 of the Environmental Conservation Law as enacted by Chapter 740 of the Laws of New York, 1978, the following report is submitted to the Governor and the Legislature of the State of New York.

The First and Second Annual Used Oil Reports were very well received; not only in New York State, but across the nation as well.

The National Association of States Oil Recovery Coordinators decided to use the format of these Used Oil Reports as a model to be emulated in other state used oil programs.

In 1981, the Department of Environmental Conservation (DEC) hoped to prepare and submit the Third Annual Used Oil Report. However, DEC still has not received any appropriations to permit proper administration of a Used Oil Program which is so important to our energy and conservation needs. Therefore, severe shortages of staff and other program resources precluded DEC from preparing the report mandated by Chapter 740.

The DEC budgetary situation is even more bleak this year and the Used Oil Program remains unfunded.

In a final effort to present the Governor and the Legislature with an accurate assessment of the current state of used oil problems and recycling opportunities, DEC has prepared this report. Unless DEC receives additional funds to implement Chapter 740, it is unlikely that additional reports will be prepared.

With the enactment of Chapter 740 on August 7, 1978, New York State became one of the few states with legislation to regulate and encourage used oil collection and recovery.

The principal objective of this legislation is to keep used oil off the land and out of water supplies and to return a valuable resource to productive use.

Chapter 740 included five main elements which are briefly described below:

1. A new Title 23 (Rerefining of Used Oil) was added to the New York State Environmental Conservation Law. Significant provisions include the following:

A. All state and local officials shall act within their authority to encourage the use of rerefined or reprocessed oil.

B. Effective September 1, 1979 every person, service establishment, industrial operation, airport, trucking terminal, state or local government facility generating at least 500 gallons per year of used oil must provide and maintain used oil retention facilities which must be periodically emptied by registered industrial waste scavengers.

C. DEC may promulgate rules and regulations defining proper design and maintenance of used oil retention facilities.

D. DEC may direct the delivery of used oil by industrial waste scavengers to rerefiners.

E. Every service establishment is required to accept at no additional charge used oil in quantities not exceeding 5 gallons per day from any individual.

F. All used oil collectors and rerefiners are required to maintain complete and adequate records.

G. The Commissioner of Environmental Conservation in consultation with the Commissioners of the State Energy Office and The Department of Transportation shall submit a report to the Governor and the Legislature, not later than April 1 of each year, regarding the reclamation, rerefining and reuse of used oil in New York State.

2. Title 22 of the Environmental Conservation Law is amended to provide administrative and civil sanctions for violations of Title 23.

3. The State Energy Office is required to implement a public information program to inform public and private sectors of the state as to the merits of rerefined oil and to promote petroleum resource conservation, recovery and reuse by industry and the general public.

4. The General Business Law is amended to clarify labeling requirements for rerefined oil and to require that all containers of lubricating oils intended for sale in New York State bear a notice which warns of improper disposal of used oil and encourages the return of used oil to a retention or recycling facility.

5. The Highway Law is amended to require the Commissioner of the Department of Transportation to promulgate standards for the use of used oil for dust control.

A copy of Chapter 740 of the Laws of New York, 1978, is contained in Appendix I. This legislation requires that the Commissioner of the Department of Environmental Conservation shall submit a report to the Governor and the Legislature not later than April first of each year containing, but not limited to, the following information:

1. The amount of lubricating oil sold throughout the State in the previous year;
2. The amount and location of used oil collected and the amount received in the previous year;
3. The significance of used oil as a contributor to air and water pollution and other environmental problems;
4. The problems of the oil rerefining industry in carrying out the purposes of this title, and possible solutions thereto, including but not limited to, new technological requirements, marketing techniques and deficiencies and suggested tax incentive programs;
5. The estimated impact which the provisions of this title and other relevant provisions of law have had upon the conservation of petroleum resources; and
6. Proposals for further legislative action to aid in carrying out the purposes of this title.

This report follows the format outlined in Chapter 740.

1. The Amount of Lubricating Oil Sold Throughout the State in the Previous Year

Based on available data, the New York State Energy Office has estimated that 56,304,000 gallons of automotive lubricants and 44,262,000 gallons of general industrial lubricants were sold in New York State in 1980, and 52,849,000 gallons of automotive lubricants and 41,914,000 gallons of general industrial lubricants were sold in New York State in 1981.

The totals of 100,566,000 gallons of lubricants sold in 1980 and 94,763,000 gallons of lubricants sold in 1981 may be compared with approximately 103,000,000 gallons sold in New York State in 1979.

The New York State Energy Office estimated national sales of lubricating oil in 1979 to be approximately 2,558,000,000 gallons. New York State continues to account for roughly four percent of this total.

Approximately 55 percent of sales of lubricating oil in New York State are accounted for by automotive lubricants.

2. The Amount and Location of Used Oil Collected and the Amount Received in the Previous Year.

As indicated in previous reports the nature and extent of records which have been kept concerning the collection and rerefining of used oil are not adequate for purposes of providing detailed information concerning the amount and location of used oil collected and the amount received or recycled in the previous year. Chapter 740 recognized and addressed this problem by enacting Sections 23-2303, 23-2305, 23-2307 and 23-2309 of the

Environmental Conservation Law to require the keeping of more detailed and useful records relating to the collection and recycling of used oil. Although most of these requirements were implemented in 1979 and 1980, they were not able to have an impact on the quality of data generated during those years.

The quality of data currently available concerning used oil collection and recycling is still being improved upon.

For the 1979-1980 registration year, 152 used oil collectors reported the collection of 50,145,000 gallons of used oil. For the 1980-1981 registration year 170 used oil collectors reported the collection of 56,466,000 gallons of used oil.

Appendix II shows the amount of used oil collections reported by used oil collectors registered in each of the nine Environmental Conservation Regions, as well as by registered "out-of-state" collectors in 1979 and 1980. Appendix III indicates the location of each DEC region. It is important to note that this data is based on the geographic location of the collector and not the collection point and that the data reported by the collectors has not been audited.

Estimates of the amount of used oil available for recycling vary somewhat; however, the United States Department of Energy has determined that approximately 50 percent of the lubricating oil sold in the United States each year is consumed in use or is lost in other ways such as through leakage or being discarded with used filter cartridges.

The State Energy Office estimated 36,034,560 gallons of used automotive lubricants and 13,721,220 gallons of used industrial lubricants or a total of 49,755,780 gallons of used oil should have been available for collection by used oil haulers in 1980. In addition, 33,459,000 gallons of used automotive lubricants and 13,314,000 of used industrial lubricants or a total of 46,773,000 gallons of used oil should have been available for recovery in 1981.

There is no easy explanation of the reasons why the amount of used oil collected exceeds the amount that should be available for collection. However, some possible contributing reasons may include improper reporting of used oil collections and increased volume due to moisture and other contaminants entrained in the used oil.

Without the ability to audit annual reports submitted by registered collectors, the validity of this data cannot be estimated.

In addition, past experience has shown that approximately 25 percent of the used oil available for recovery is never accounted for. Much of this is the result of "do-it-yourself" oil changes; and this oil may even have been disposed of in the sewer, the garbage can or may have been dumped indiscriminately on the land. A certain amount may also have been used in road oiling for dust control.

The number of firms in this country which rerefine used oil into a lubricating oil feedstock has been steadily dwindling. In 1960, approximately 150 rerefiners were operating in this county. By 1981, only 8-12 firms remained in operation. Only one firm, Booth Oil Company, Inc. in North Tonawanda remains in New York

State. The amount of used oil potentially available in this State exceeds Booth Oil's rerefining capacity by a factor of approximately 20 to 1.

The vast majority of used oil collected in New York State appears to be reprocessed for use as a fuel.

Full implementation of Sections 23-2305 and 23-2309 of the Environmental Conservation Law will improve the quality of information available concerning the recycling of used oil generated in New York State.

3. The Significance of Used Oil as a Contributor to Air and Water Pollution and Other Environmental Problems

Although used oil is a valuable resource, it holds the potential for causing serious and unnecessary environmental damage through improper use or indiscriminate disposal. Previous Used Oil Reports have discussed these issues in detail. A portion of the discussion in the Second Annual Used Oil Report is repeated here to maintain continuity in the present discussion of the environmental significance of used oil recycling and disposal.

Used lubricating oils contain a wide variety of contaminants. Common contaminants include water, sediment and products of oxidation, as well as metallic particles resulting from machinery wear. In addition, used automobile crankcase oils contain high concentrations of lead which is present in leaded gasoline and is transferred to the crankcase oil during combustion.

Increased use of unleaded gasoline is expected to continue to reduce lead concentrations in used oil.

In comparison with residual oil, used oil generally contains substantially higher concentrations of lead, magnesium, calcium, iron, phosphorus, zinc, barium, copper, chromium and tin.

The United States Department of Energy estimates that as much as half of the used oil generated in this country may be discharged directly into the environment through indiscriminate dumping into waterways, municipal sewers or onto land surfaces, as well as through use in road oiling and dust or weed control.

In the past, substantial amounts of used oil collected in this state were used in road oiling.

A limited study carried out by the Unitied States Environmental Protection Agency in 1972 examined the effects of treating two rural roads with used crankcase oils. Over a 23-year period, it was estimated that 99 percent of the oil applied to the surface had left the road surface on dust particles and in water runoff or by being volatilized or biodegraded. Only one percent of the used oil remained in the tops one inch of the road surface. Furthermore, the road surface contained high concentrations of lead and other toxic materials found in used oil. Runoff from roads that have been oiled with used oil may contaminate roadside crops with lead and other toxic materials and may also enter the groundwater system.

Effective September 1, 1979, Part 161 of Title 17 of the Official Compilation of Codes, Rules and Regulations of New York State prohibited the use of either new or used oil for dust control. A clear exception was made to permit the use of emulsified or cutback asphalt in what is commonly known as "oil and stone" treatment.

Whether through runoff from roads or from indiscriminate dumping of used oil, concentrations of as little as one part per million of oil in surface or groundwater causes taste or odor problems and can harm many forms of aquatic life. In addition, municipal or industrial waste treatment processes can be fouled by concentrations of 50 to 100 parts per million of oil.

A report entitled Used Oil Burned As A Fuel, Volume I (SW-892) published in 1980 by the U.S. Environmental Protection Agency (USEPA) estimated the ultimate fate of used oil generated in this country to include 1.09 billion gallons per year burned as fuel; 220 million gallons per year used for road oiling, dust control and other uses; and only 50 million gallons per year rerefined into lubricating products.

The rate of burning used oil as a fuel exceeded the rate of rerefining by a factor of more than 20 to 1.

Not only is the burning of used oil as a fuel widespread, but it is one of the uses which holds the greatest potential for environmental damage, particularly if used oil is burned without reprocessing to remove toxic contaminants or in combustion units which lack adequate air pollution control equipment. This results in a significant degradation of air quality.

The burning of used automobile crankcase oil, for example, could result in significant emissions of lead. The DEC Division of Air Resources estimates that most lead emissions caused by burning used oil can be eliminated by pretreatment to remove lead before burning, or by using adequate air pollution control equipment to remove lead after combustion.

Steady increases in the cost of fuel oil have exacerbated problems associated with burning used oil as a fuel.

It is cheaper to reprocess used oil as a fuel than to rerefine used oil into a lubricating oil basestock. Therefore, reprocessors can pay a higher price for used oil than can rererfiners. Unscrupulous firms which collect or purchase collected used oil and sell it untreated have usurped an even greater price advantage by eliminating the cost of reprocessing. These firms may either sell the untreated used oil to unsuspecting customers for use as a fuel or they may deal with equally unpriniciplec individuals who knowingly purchase untreated used oil to be utilized as a "discount" fuel oil.

The United States Environmental Protection Agency estimates that up to 90 percent of easily recoverable used oil is consumed as a fuel with little or no reprocessing to remove contaminants.

Combustion of untreated used oil produces significant adverse impacts on air quality. These combustion facilities are not only unmonitored, their locations are usually unknown to regulatory authorities.

This leads to an even more serious environmental problem with the possibility of individuals or firms seeking to clandestinely mix polychlorinated biphenyls (PCBs) and other toxic or hazardous chemical wastes with used oil and selling or using the mixture as a fuel as a means of disposing of such wastes.

Many of these firms are paid well to properly dispose of hazardous wastes and simply "pocket" these payments after illegally mixing the wastes with used oils. Others mix their own hazardous wastes with used oil and escape the otherwise substantial costs of environmentally sound disposal of hazardous wastes.

These business techniques represent a highly profitable form of "midnight dumping during the daytime" by operating under the cloak of respectability seized from responsible used oil reprocessors.

This report is not intended to condemn all of those associated with the collection, processing and recycling of used oil. Many responsible used oil reprocessors sample each load of used oil for toxic or hazardous contaminants and reject any contaminated loads. Many facilities, such as Skidmore College in Saratoga, New York, which burn reprocessed used oil do so quite satisfactorily while operating under strict environmental controls and safeguards.

However, the lack of adequate regulatory programs and staff on both the State and the federal level means that most unscrupulous firms will continue to operate undetected and responsible reprocessors must continue to operate under the pall cast by those firms.

4. The Problems of the Oil Rerefining Industry in Carrying Out the Purposes of this Title, and Possible Solutions thereto, Including but not Limited to, New Technological Requirements, Marketing Techniques and Deficiencies and Suggested Tax Incentive Programs

Previous Used Oil Reports have dealt with the basic problems facing the rerefining industry. Since these basic problems are relatively unchanged, they will merely be summarized here.

The basic problems include:

- The rerefining industry is a relatively small industry which generally still employs an old process technology and which is quite sensitive to economic fluctuations.
- The most commonly employed rerefining process is the acid/clay treatment process which has relatively high operating costs and which produces a toxic by-product in the form of an acid sludge which poses difficult disposal problems. Vacuum distillation techniques, which are more environmentally acceptable, are beginning to find commercial application in this country. This type of technology produces by-products which are much less harmful and should be easier to develop alternate uses for than the acid sludge produced by the acid/clay treatment process.

- Although acid sludges can be treated to neutralize them, they will still contain all of the toxic contaminants removed from the used oil. Consequently, even neutralized sludges will still present serious economic and environmental disposal problems.
- The immediate prospects for increased rerefining or reprocessing in New York State remain limited by the lack of adequate rerefining and reprocessing capacity. Because of inadequate capacity, significant amounts of the used oil generated in New York State are shipped out of state for processing. The lack of adequate rerefining and reprocessing capacity tends to drive a valuable resource from the State.
- Another major problem faced by rerefiners, generally, is the competition for sufficient volumes of used oil to be used as a feedstock. Since the Oil Embargo in 1973, the cost of fuel oil has risen dramatically. Consequently, the demand for and utilization of used oil as a fuel has also risen substantially. Section 23-2307 of the Environmental Conservation Law, which requires the installation of used oil retention facilities, will have the effect of making larger suplies of used oil available for rerefining or reprocessing.
- The cost of reprocessing used oil to be burned as a fuel is significantly less than the cost of rerefining

used oil to produce a lubricating oil basestock. Also, the cost of transporting used oil to geographically widespread rerefiners is much higher than the cost of transporting to a local fuel user. consequently, reprocessors or fuel users can generally afford to pay a higher price for used oil than rerefiners. This margin is made even wider if fuel oil users are able to escape the costs of reprocessing or emission controls by burning unprocessed used oil without adequate air pollution control equipment.

- The New York State Office of General Services has encountered difficulty in locating suppliers which can offer a qualified rerefined engine lubricating oil at a reasonable price. No programs currently exist to stimulate and encourage the procurement of rerefined or reprocessed oils by State agencies and local governments.

A major problem now facing reprocessors and rerefiners, alike, is the application of State and federal hazardous waste regulations. Most used automotive crankcase oils are expected to fail Extraction Procedure Toxicity Tests for lead. The sludge from any reprocessing facility or rerefinery which processes a "hazardous" used oil will also be hazardous. Even if the used oil feedstock is not determined to be hazardous, the concentration of contaminants in the sludges will likely cause the sludges to be declared hazardous.

The application of State and Federal hazardous waste regulations to used oil will be discussed in more detail in the following section.

5. The Estimated Impact Which the Provisions of this Title and Other Relevant Provisions of Law have had upon the Conservation of Petroleum Resources

When the Second Annual Used Oil Report was written in March, 1980 the cumulative impact of Title 23 (Rerefining of Used Oil) was just beginning to be felt. There was no realization at that time that both State and Federal used oil programs were about to crumble.

Although Chapter 740 was passed without any appropriations and DEC had no used oil program staff, DEC did have 16 staff persons in its former Bureau of Resource Recovery. One of these staff persons did manage to devote a portion of his time to used oil programs. On September 30, 1980, however, funding for resource recovery programs under Subtitle D of the Federal Resource Conservation and Recovery Act (RCRA) was terminated and 12 of these 16 staff positions were abolished. The remaining four staff persons have been dedicated to administration of the solid waste recovery and management portion of the Environmental Quality Bond Act of 1972 and are unable to devote time to the administration or implementation of Chapter 740.

More recently, the State Energy Office has been hard hit by budget cuts and has been unable to implement the public education programs mandated by Chapter 740.

The enactment on October 15, 1980 of the Federal Used Oil Recycling Act of 1980 (Public Law 96-463) provided a stong ray of hope that the Federal Government would assume a significant leadership role in used oil recycling. This Federal legislation incorporated much of our State used oil legislation and promised to provide both technical and financial assistance to the states. Unfortunately, no funds were ever appropriated for the authorization of $5,000,000 in each of Federal fiscal years 1982 and 1983. In fact, USEPA publicly stated that such funds were unnecessary since State Used Oil Programs could be funded under Subtitle C or D of RCRA. Subtitle D funds have been totally eliminated. Subtitle C funds have been reduced and may soon be eliminated as well. Certainly in New York State and perhaps throughout the nation, no Subtitle C funds are being used to assist State Used Oil Programs.

Not only has USEPA failed to even attempt to implement the Used Oil Recycling Act of 1980, it has also failed to define a used oil policy to guide the used oil industry through the maze of federal hazardous waste regulations.

The fate of other federal agencies involved with used oil recycling indicates there will soon be a total lack of a federal presence in this field.

The U.S. Department of Energy is being dismantled and the Bartlesville Energy Technology Center in Bartlesville, Oklahoma is about to be closed. USEPA has stated it relies heavily on the used oil research and development work done by the Department of Energy in the Bartlesville Energy Technology Center, yet USEPA has no plans to do any research and development work on its own. Furthermore, the Office of Recycled Materials (and its Used Oil Program) in the National Bureau of Standards, U.S. Department of Commerce has been "zero-funded" for the 1982-1983 Federal fiscal year.

The National Association of States Oil Recovery Coordinators was once quite active in used oil recycling, but federal budget cuts and the lack of federal financial support have substantially reduced this organization's effectiveness.

With this rather dismal state of recent events, where does New York State stand in the area of used oil recycling?

DEC efforts to implement Chapter 740 have fallen far short of the mark. The principal reason is the failure of both the State and Federal legislatures to provide financial support to enable DEC to assemble the staff and develop the program necessary to properly implement this important legislation. State Energy Office efforts to fulfill its mandate to implement public education programs under Chapter 740 appear to be terminally affected for the same reasons.

Even without a used oil staff, DEC has managed some minimal implementation of Chapter 740.

Recently promulgated regulations, Part 360 (Solid Waste Management Facilities) of Title 6 of the Official Compilation of Codes, Rules and Regulations, set specific standards for waste oil facilities pursuant to Title 23 of Article 23 of the Environmental Conservation Law. A permit will be required to construct or operate a waste oil storage, reprocessing or re-refining facility. Such facilities must be designed, constructed and operated in accordance with the New York State Building Construction Code or applicable local Building and Fire Codes. No permit is required for used oil retention facilities; however, such facilities must be designed, constructed and operated in accordance with the New York State Building Construction Code or applicable local Building and Fire Codes. Additional provisions reiterate certain requirements of Chapter 740 of the Laws of 1978.

In addition, the hazards presented by road oiling with used oil were significantly reduced by regulations promulgated by the New York State Department of Transportation. Effective September 1, 1979, Part 161 of Title 17 of the Official Compilation of Codes, Rules and Regulations of New York State prohibited the use of either new or used oil for dust control. A clear exception was made to permit the use of emulsified or cut-back asphalt in what is commonly known as "oil and stone" treatment.

Current federal hazardous waste policies related to used oil collection and recycling remain vague and undefined. USEPA is not expected to release hazardous waste regulations concerning used oil until late 1983 at the earliest.

Officials in the USEPA Office of Hazardous and Industrial Waste have indicated that used oil which is declared hazardous for failing Extraction Procedure Toxicity Tests for lead will likely be treated less stringently than other hazardous wastes under RCRA by exempting used oil which is recycled. This would mean that only used oil which is a characteristic hazardous waste and is not recycled would fall under federal hazardous waste regulations. At the present time USEPA appears to consider both burning and road oiling, as well as rerefining, as recycling of used oil.

Current New York State hazardous waste regulations deal with used oil but do not sufficiently encourage or facilitate used oil recycling. In addition to Part 360, 6NYCRR Parts 364, 365, and 366 all may apply to used oil collection and disposal.

Part 364 requires a permit for the collection, transport and transfer of several types of waste, including used oils, and requires delivery of such wastes to a treatment, storage, processing or disposal facility which possesses a valid permit.

Part 365 establishes the use, reporting, and recordkeeping requirements associated with the hazardous waste manifest system and related requirements for generators, transporters and facilities dealing with hazardous waste.

Part 366 lists those wastes that are hazardous. It is similar to U.S. EPA regulation 40 CFR Part 261, Identification of Hazardous Wastes.

Current New York State hazardous waste regulations control the movement from point of generation through ultimate destruction, disposal or reuse of all "characteristic" or "listed" hazardous wastes. The bulk of used oil collected in New York State comes from automotive crankcase drainings and contains a sufficiently high concentration of lead to be termed a characteristic hazardous waste. This means that such used oil must be "manifested" under Part 365 usually beginning at the point of pickup or collection by a collector licensed under Part 364.

Part 365 does contain an important exemption for small generators of used engine lubricating oils. Facilities such as gas stations and automotive service centers which generate less than 1000 kilograms per month (approximately 270 to 300 gallons per month) of used engine lubricating oil that is hazardous solely by failing the Part 366 criteria for hazardous waste (characteristics include ignitability, corrosivity, reactivity and extraction procedure toxicity) are exempt from all manifesting requirements under Part 365 provided the used oil is destined for beneficial use, reuse, recycling or reclamation; is collected by a hauler in compliance with Pa[illegible]64; and the generator ensures delivery of the used oil to a facility complying with Part 360.

Part 366 also "lists" as a hazardous waste all petroleum oil which is contaminated with 50 parts per million or greater of polychlorinated biphenyls (PCBs). Such wastes are not exempt from Part 365 under the exemption described above since PCBs cannot be removed by normal reprocessing techniques.

Although each generator or collector is legally responsible for determining if his used oil is a hazardous waste, there are no specific test procedures or standards established for testing used oil. However, collectors or generators are subject to substantial penalties if their wastes are not treated as hazardous but are found to be hazardous under existing regulations.

Present application of hazardous waste regulations is somewhat complicated since DEC is in the process of applying to USEPA for interim authorization for its hazardous waste program. Consequently, both State and Federal hazardous waste regulations are presently in force. Unless and until DEC accepts interim authorization, both Part 365 and 40 CFR 262 and 263, and both Part 366 and 40 CFR 261 will be in effect in New York State.

The DEC Division of Solid Waste is now in the process of developing a draft Used Oil Policy to eliminate many of the problems now facing used oil collection and recycling in New York State. This draft policy, however, is not expected to be available for public comment for several months.

6. Proposals for Further Legislative Action to Aid in Carrying out the Purposes of this Title

The DEC draft Used Oil Policy now being developed by the Division of Solid Waste is expected to combine the concept of exempting from hazardous waste regulation used oils which are recycled, with the concept of "certified fuels".

The concept of "certified fuels" is founded on the realization that indiscriminate burning of fuels blended from waste lubricating oils, solvents or from other sources which are hazardous may result in contamination of the air and cause damage to the environment and injury to the health of the public.

DEC is exploring the possibility of "certifying" fuels which would be composed or blended from flammable hazardous wastes which could then be transported, stored and burned at selected industrial facilities.

The certification process would be developed in such a way as to include a comprehensive system of waste generation controls, waste and/or blended fuel sampling, transportation mass-balance checks, storage conditions, combustion controls and air emissions evaluations. These controls collectively would ensure complete environmental and public health protection.

Each shipment of certified fuel would only be authorized to go to approved burning facilities, and the certification process would guarantee that each and every shipment of "certified" fuel is not diverted to an unauthorized burning facility or adulterated with other wastes before it gets to the certified burning facility.

The certified fuels program may require legislation to authorize its implementation.

The DEC Division of Air is drafting a proposal which could prohibit the sale or use of used oil as a fuel without a special project review and an air pollution control permit. Officials at both the State and Federal level are just beginning to understand the potential air pollution problems associated with the vast range of used oils and solvents. Much more research is needed in the areas of sampling procedures, combustion evaluation and safe ambient levels. Since these problems affect all of the State, USEPA should be taking the lead in these areas and should be providing general guidance and direction to the States. USEPA seems intent, instead, on abdicating all responsibility in these areas.

The U.S. House of Representatives through the Committee on Small Business and the Subcommittee on Energy, Environment and Safety Issues Affecting Small Business is cognizant of the problems involved in used oil collection and recycling. The Subcommittee held a hearing in New York City on February 11, 1982 to investigate present used oil recovery levels and what can or should be done to improve them, and the economic, environmental and legal factors affecting the choice of recovery methods. Some important views concerning Chapter 740 were expressed at this hearing:

- The Vice-President of the Association of Petroleum Rerefiners testified of the need for programs to encourage rerefining, for enforcement of existing laws and for support for current programs.

- o Testimony presented by the New York State Association of Service Stations indicated that initial resentment at being forced to accept used oil from "do-it-yourselfers" has been supplanted by enthusiasm for participating in public education programs to induce consumers to bring used oil to collection centers.
- o The New York Oil Heating Association testified that rather than more legislation, New York State needs to enforce existing statutes and regulations.

If the State Legislature is unable to appropriate sufficient funds, DEC believes that Chapter 740 could be properly financed and implemented through the initiation of a fee system which would charge a minimal fee for each gallon of lubricating oil sold in New York State. For example, a one cent per gallon fee applied to the approximately 100 million gallons of lubricating oil sold each year in this State, would generate approximately $1,000,000 per year to support used oil programs.

The immediate prospects for increased rerefining or reprocessing in New York State remain limited by the lack of adequate rerefining and reprocessing capacity. Because of inadequate capacity, significant amounts of the used oil generated in New York State are shipped out of state for processing. The lack of adequate rerefining and reprocessing capacity tends to drive a valuable resource from the state. DEC is also finding that the used oil driven from the State often returns as fuel contaminated with hazardous wastes.

More work must be done by both the State and the Federal Government to improve the opportunities for recycling used oil. This work must involve investigating alternative methods of assisting rerefiners and reprocessors to more effectively treat and dispose of by-product sludges and to encourage the replacement of old technologies with newer, more environmentally acceptable processes.

The competitive position and prospects for rerefining will be improved and the possibility of indiscriminate burning will be reduced by increasing the regulation of the end use of used oil and improving controls over burning used oil to ensure that used oil is properly processed prior to burning and that adequate emission controls are employed in the combusting unit.

Both the State Legislature and the U.S. Congress have failed to provide adequate legislation including inspection procedures and the manpower necessary to ensure the safe recycling or reuse of used oils and environmentally sound disposal of toxic or hazardous by-products of used oil recycling.

Tougher laws by themselves will not solve these problems unless the environmental agencies such as DEC are given the funds necessary not only for adequate inspection and monitoring, but more importantly to implement the good legislation such as

Chapter 740 which already exists.

Congress and the State Legislature must recognize that by failing to provide adequate legislation or by failing to provide funding for existing legislation, there will be no State used oil programs, this State and the nation will continue to waste a valuable resource, and our air and water resources will continue to suffer serious degradation from improper disposal or recycling of used oil.

Unless DEC receives sufficient financial support to develop a used oil program, it is unlikely that additional reports will be prepared, and Chapter 740 will not be properly implemented.

Appendix I

LAWS OF NEW YORK, 1978

CHAPTER 740

AN ACT to amend the environmental conservation law, the energy law, the general business law, and the highway law, in relation to fostering the conservation of petroleum resources and the abatement of air and water pollution by the state, the political subdivisions and its citizens by providing for a statewide system of encouraging the reclamation, rerefining and reuse of used oils

Became a law August 7, 1978, with the approval of the Governor. Passed by a majority vote, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Legislative intent. The legislature hereby finds and declares that about one hundred ten million gallons of oil are consumed in New York state each year, with about fifty-five million gallons being collectible waste oil. Over half of this waste oil is dumped into the state's environment and another third is burned as fuel. This waste oil, which contributes up to fifteen percent of all oil entering our waterways, contains many toxic substances, particularly heavy metals, and constitutes a hazard to the environment and to human health. Faced with the inflationary impact of increased oil costs and an accompanying shortage of lubricating oil, New York state can turn an environmental and health hazard into a valuable resource. At current prices, rerefined lubricating oil still provides a significant margin of profit. Rerefining of waste oil requires reconcentrating the oil for collection and delivery to a rerefinery. The present uncoordinated collection system results in less than twenty percent of the waste oil reaching a rerefinery. Existing rerefining capacity can handle the waste oil generated in New York state. Rerefined products can be profitably produced and can be competitive with comparable virgin oil products with no economic dislocation and with definite advantages to the economy of the state. In order to promote resource recovery systems which preserve and enhance the quality of air, water, and land resources it is the purpose of this act to establish an effective program to promote the collection and rerefining of used oil. The state energy office should be able to accomplish the necessary promotion of rerefined products within existing manpower and budgetary levels by redirecting existing public relations activities.

Market acceptance of rerefined oil as a lubricant has been poor in the past despite evidence that it can be equivalent to virgin oil in all relevant properties. The National Bureau of Standards is currently reviewing the characteristics of and label requirements for waste oil. Appropriate federal government action should help to accelerate consumer acceptance of rerefined oil and improve its marketability.

With over ninety percent of all service stations in the state now having waste oil retention facilities, there will be a minimal need for capital investment by retailers of oil. The retailers would not be required to keep records of volume of oil inventory, on-premises sales, off-premises sales, or used oil sold or otherwise disposed of since used oil collectors would maintain sufficient similar records.

§ 2. Article twenty-three of the environmental conservation law is hereby amended by adding a new title twenty-three to read as follows:

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* EXPLANATION—Matter in *italics* is new; matter in brackets [ ] is old law to be omitted.

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TITLE 23

REREFINING OF USED OIL

Section 23-2301. Definitions.
23-2303. Official encouragement for the use of rerefined oil.
23-2305. Regulations of the commissioner.
23-2307. Used oil retention facilities required; installation and maintenance.
23-2309. Records.
23-2311. Reports.

§ 23-2301. Definitions.

For the purposes of this title:

1. The term "used oil" means all petroleum-based lubricating oils which have through use been contaminated by physical or chemical impurities which have not been removed by subsequent rerefining;

2. The term "rerefined oil" means used oil which has been refined to remove the physical and chemical contaminants so that it shall be suitable for lube stock or fuel oil acquired through use, which by itself or when blended with new oil or additives is substantially equivalent or superior to new oil intended for the same purposes, as specified in the American Petroleum Institute's engine service classifications;

3. The term "new oil" means all oil which has been refined from virgin oil and may or may not contain additives, but has never been used, and does not include used oil or rerefined oil;

4. The term "lubricating oil" means all petroleum-based oil which:

a. is suitable for use as a lubricant, or

b. is sold for use as a lubricant;

5. The term "fuel oil" means all oil which has been refined, rerefined, or otherwise processed for the purpose of being burned to produce heat;

6. The term "on-premises oil changing operation" means any establishment that drains or collects used oil and replaces the used oil with new or rerefined lubricating oil;

7. The term "service establishment" means every automobile service station including gas only outlets and any other retail outlet and boat marina selling at least five hundred gallons of lubricating oil annually and having an on-premises oil changing operation;

8. The term "used oil collector" means any industrial waste scavenger as defined in title three of article twenty-seven of this chapter who controls a system which functions to retrieve or collect used oil for sale or transfer to oil rerefining facilities, or for other methods of disposal, but shall not include service establishments; and

9. The term "rerefiner" means any person who rerefines used oil to remove its physical and chemical contaminants.

§ 23-2303. Official encouragement for the use of rerefined oil.

All state and local officials shall act within their authority to encourage the use of rerefined oil. Such action shall include, but not be limited to:

1. Review of any laws, rules and regulations, ordinances or specifications which exclude the use of rerefined oil products that meet the standards as specified in the American Petroleum Institute's engine service classifications for oil products; and

2. Educating the private sectors of the economy as to the merits of rerefined oil, and the need for its use in order to reduce the drain on the nation's oil reserves and minimize the disposal of used oil in ways harmful to the environment.

§ 23-2305. Regulations of the commissioner.

The commissioner shall, after holding a public hearing with due notice, promulgate rules and regulations governing used oil collectors and rerefiners, in conformance with article twenty-seven of this chapter, to carry out the requirements of this title.

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§ 23-2307. Used oil retention facilities required; installation and maintenance

1. *Every service establishment, and every other person, industrial operatio airport, trucking terminal, state or local government facility generating at least fi hundred gallons of used oil annually, shall, no later than September first, ninetee hundred seventy-nine, provide and maintain used oil retention facilities, proper sheltered and protected to prevent spillage, seepage or discharge of used oil into stor or sanitary sewers or into the waters of the state. The used oil shall be periodical removed from the retention facility by an industrial waste scavenger duly register with the department of environmental conservation. Industrial waste scavengers ma dispose of used oil only by delivery to a rerefiner except where otherwise permitted b the commissioner. Rules and regulations defining proper design and maintenance a retention facility may be promulgated by the commissioner.*

2. *Every service establishment shall be required to accept at no additional charg used oil in quantities not exceeding five gallons per day from any individua provided, however, this requirement does not apply if the used oil retention facility temporarily filled to capacity.*

§ 23-2309. Records.

Every used oil collector and rerefiner shall maintain complete records, i conformance with article twenty-seven of this chapter.

§ 23-2311. Reports.

The commissioner shall in consultation with the commissioners of the state energ office and transportation, submit a report to the governor and legislature not late than April first of each year, containing, but not limited to, the followin information:

1. *The amount of lubricating oil sold throughout the state in the previous year;*
2. *The amount and location of used oil collected and the amount received in th previous year;*
3. *The significance of used oil as a contributor to air and water pollution an other environmental problems;*
4. *The problems of the oil rerefining industry in carrying out the purposes of th title, and possible solutions thereto, including but not limited to, new technologica requirements, marketing techniques and deficiencies and suggested tax incentiv programs;*
5. *The estimated impact which the provisions of this title and other relevan provisions of law have had upon the conservation of petroleum resources; and*
6. *Proposals for further legislative action to aid in carrying out the purposes o this title.*

§ 3. Article seventy-one of such law is hereby amended by adding a new titl twenty-two to read as follows:

TITLE 22

ENFORCEMENT OF TITLE 23 OF ARTICLE 23

Section 71-2201. Enforcement of title 23 of article 23 of this chapter.

§ 71-2201. Enforcement of title 23 of article 23 of this chapter.

Administrative and civil sanctions. Any person who violates any of the provision of, or who fails to perform any duty imposed by title 23 of article 23 except the dut to accept used oil pursuant to section 23-0307 or any rule or regulation promulate pursuant thereto, or any term or condition of any certificate or permit issue pursuant thereto, or any final determination or order of the commissioner mad pursuant to this section shall be liable for a civil penalty not to exceed one thousan dollars for each such violation and an additional penalty of not more than fiv hundred dollars for each day during which such violation continues, to be assessed b the commissioner after a hearing or opportunity to be heard pursuant to th provisions of section 71-1709 of this chapter, and, in addition thereto, such perso may by similar process be enjoined from continuing such violation and any permi

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or certificate issued to such person may be revoked or suspended or a pending renewal application denied.

2. Any person who refuses to accept used oil as required pursuant to subdivision two of section 23-2307 shall be liable for a civil penalty not to exceed one hundred dollars.

§ 4. Section 5-105 of the energy law is hereby amended by adding a new subdivision eighteen-a to read as follows:

18-a. To implement a program of public information to inform the public and private sectors of the state as to the merits of rerefined oil, and the need for its use in order to reduce the drain on the nation's oil reserves and minimize the disposal of used oil in ways harmful to the environment and to promote petroleum resource conservation, recovery and reuse by industry and the general public of the state.

§ 5. Subdivision five of section three hundred ninety-one-a of the general business law, as added by chapter one thousand thirty-one of the laws of nineteen hundred sixty-five, is hereby amended to read as follows:

5. Shall expose for sale, offer for sale, sell or store, in any manner so as to deceive or tend to deceive the purchaser as to the nature, origin, quality, grade or identity of the product so sold or offered for sale or shall sell, expose for sale, offer for sale, sell or store, in any manner so as to deceive or tend to deceive the purchaser of any lubricating oil, lubricants, mixtures of lubricants, any part of which had been once used for lubrication purposes and subsequently reclaimed, refined, [re-refined] *rerefined* or reconditioned without clearly indicating or setting forth such fact by means of the words ["reclaimed oil"] *"rerefined oil"* on the container pump or other distributing device used, *provided, however, that the provisions of this subdivision shall not apply to sales of any rerefined lubricating oils, lubricants or mixtures of lubricants which conform to performance standards as specified in the American Petroleum Institute's engine service classifications*; or

§ 6. Such law is hereby amended by adding a new section three hundred ninety-one-h to read as follows:

§ 391-h. Lubricating oils; container; notice required. On and after September first, nineteen hundred seventy-nine, it shall be unlawful for any person, firm or corporation to sell or expose for sale at wholesale or retail any lubricating oil packaged in containers intended for sale at retail unless such container shall have imprinted thereon a notice in like or similar terms to the following:

"Notice

Used oil contains contaminants that are hazardous to the environment. In states where law prohibits the improper disposal of used lubricating oil, in order to assure proper disposal, please deposit used oil in the nearest available used oil retention facility".

A knowing violation of this section shall be punishable by a fine not to exceed five hundred dollars.

§ 7. The highway law is hereby amended by adding a new section ten-b to read as follows:

§ 10-b. Use of used oil for dust control. The commissioner shall, within one year from the effective date of this section, promulgate standards pertaining to the maximum permissible concentration of contaminants in filtered, rerefined, or untreated used oil that is used for dust control. Any person or other legal entity who sells such oil for such purpose shall certify, in a manner to be prescribed by the commissioner, that such oil meets these standards.

§ 8. This act shall preempt any local law or ordinance which interferes with the provisions contained therein.

§ 9. This act shall take effect September first, nineteen hundred seventy-eight.

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The Legislature of the
STATE OF NEW YORK } *ss:*

Pursuant to the authority vested in us by section 70-b of the Public Officers Law, we hereby jointly certify that this slip copy of this session law was printed under our direction, and, in accordance with such section is entitled to be read into evidence.

WARREN M. ANDERSON
Temporary President of the Senate

STANLEY STEINGUT
Speaker of the Assembly

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID WASTE
50 WOLF ROAD
ALBANY, NEW YORK 12233

APPENDIX II

Reported Used Oil Collection - 1979

DEC Region	Number of Collectors Reporting	Amount of Used Oil Collected
1	14	2,917,000 gal
2	24	16,391,000 gal
3	14	1,604,000 gal
4	9	1,460,000 gal
5	3	454,000 gal
6	4	298,000 gal
7	9	12,500,000 gal
8	6	1,521,000 gal
9	19	9,652,000 gal
Out of State	50	3,348,000 gal
TOTAL	152	50,145,000 gal

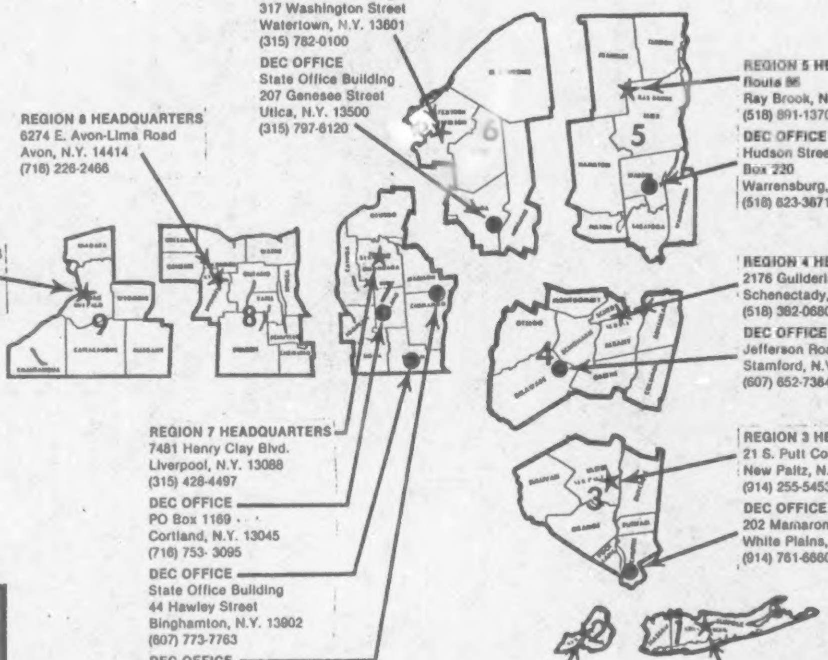
Reported Used Oil Collection - 1980

DEC Region	Number of Collectors Reporting	Amount of Used Oil Collected
1	15	2,980,000 gal
2	23	16,402,000 gal
3	17	1,901,000 gal
4	8	1,447,000 gal
5	5	495,000 gal
6	4	286,000 gal
7	10	13,221,000 gal
8	9	2,250,000 gal
9	20	10,499,000 gal
Out of State	59	6,985,000 gal
TOTAL	170	56,466,000 gal

APPENDIX III

New York State Department of Environmental Conservation

REGIONAL OFFICES



REGION 9 HEADQUARTERS
584 Delaware Ave.
Buffalo, N.Y. 14202
(716) 847-4600

REGION 8 HEADQUARTERS
6274 E. Avon-Lima Road
Avon, N.Y. 14414
(716) 226-2466

REGION 6 HEADQUARTERS
State Office Building
317 Washington Street
Watertown, N.Y. 13601
(315) 782-0100

DEC OFFICE
State Office Building
207 Genesee Street
Utica, N.Y. 13500
(315) 797-6120

REGION 7 HEADQUARTERS
7481 Henry Clay Blvd.
Liverpool, N.Y. 13088
(315) 428-4497

DEC OFFICE
PO Box 1169
Cortland, N.Y. 13045
(716) 753- 3095

DEC OFFICE
State Office Building
44 Hawley Street
Binghamton, N.Y. 13902
(607) 773-7763

DEC OFFICE
Sherborne, N.Y. 13460
(607) 674-2611

REGION 5 HEADQUARTERS
Route 86
Ray Brook, N.Y. 12977
(518) 891-1370

DEC OFFICE
Hudson Street Extension
Box 220
Warrensburg, N.Y. 12885
(518) 623-3671

REGION 4 HEADQUARTERS
2176 Guilderland Ave.
Schenectady, N.Y. 12306
(518) 382-0680

DEC OFFICE
Jefferson Road, Route 10
Stamford, N.Y. 12167
(607) 652-7364

REGION 3 HEADQUARTERS
21 S. Putt Corners Road
New Paltz, N.Y. 12561
(914) 255-5453

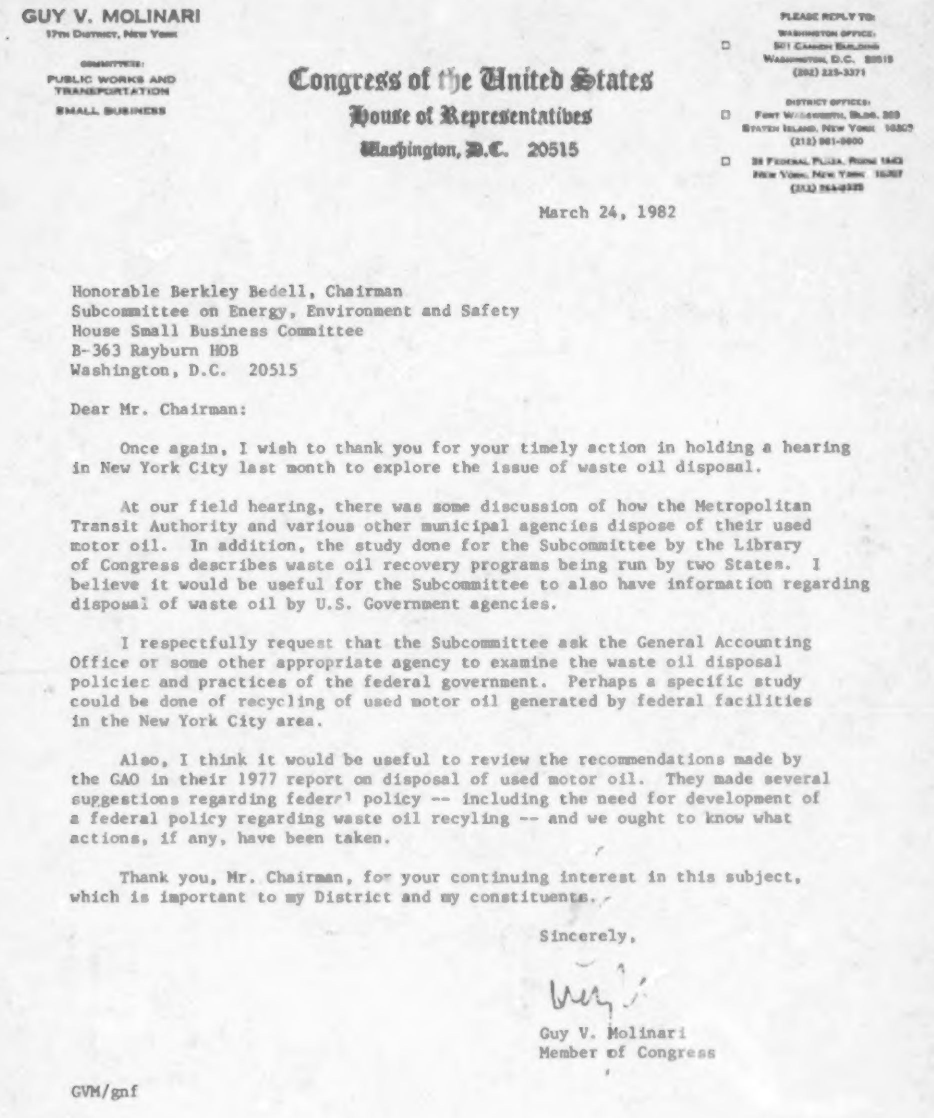
DEC OFFICE
202 Mamaroneck Ave.
White Plains, N.Y.
(914) 761-6660

REGION 2 HEADQUARTERS
2 World Trade Center
New York, N.Y. 10047
(212) 488-2764

REGION 1 HEADQUARTERS
SUNY Campus
Building 40
Stony Brook, N.Y. 11790
(516) 751-7900

CENTRAL OFFICE
50 Wolf Road
Albany, N.Y. 12233

APPENDIX K.—LETTER FROM HON. GUY MOLINARI TO HON. BERKLEY BEDELL, MARCH 24, 1982



GUY V. MOLINARI
17TH DISTRICT, NEW YORK

COMMITTEES:
PUBLIC WORKS AND TRANSPORTATION
SMALL BUSINESS

Congress of the United States
House of Representatives
Washington, D.C. 20515

PLEASE REPLY TO:
WASHINGTON OFFICE:
☐ 501 CANNON BUILDING
WASHINGTON, D.C. 20515
(202) 225-3371

DISTRICT OFFICES:
☐ FORT WADSWORTH, BLDG. 203
STATEN ISLAND, NEW YORK 10305
(212) 981-9800
☐ 26 FEDERAL PLAZA, ROOM [illegible]
NEW YORK, NEW YORK [illegible]
(212) [illegible]

March 24, 1982

Honorable Berkley Bedell, Chairman
Subcommittee on Energy, Environment and Safety
House Small Business Committee
B-363 Rayburn HOB
Washington, D.C. 20515

Dear Mr. Chairman:

Once again, I wish to thank you for your timely action in holding a hearing in New York City last month to explore the issue of waste oil disposal.

At our field hearing, there was some discussion of how the Metropolitan Transit Authority and various other municipal agencies dispose of their used motor oil. In addition, the study done for the Subcommittee by the Library of Congress describes waste oil recovery programs being run by two States. I believe it would be useful for the Subcommittee to also have information regarding disposal of waste oil by U.S. Government agencies.

I respectfully request that the Subcommittee ask the General Accounting Office or some other appropriate agency to examine the waste oil disposal policies and practices of the federal government. Perhaps a specific study could be done of recycling of used motor oil generated by federal facilities in the New York City area.

Also, I think it would be useful to review the recommendations made by the GAO in their 1977 report on disposal of used motor oil. They made several suggestions regarding federal policy -- including the need for development of a federal policy regarding waste oil recyling -- and we ought to know what actions, if any, have been taken.

Thank you, Mr. Chairman, for your continuing interest in this subject, which is important to my District and my constituents.

Sincerely,

Guy V. Molinari
Member of Congress

GVM/gnf

APPENDIX L.—LETTER FROM HON. BERKLEY BEDELL TO HON. CHARLES A. BOWSHER, MARCH 31, 1982

BERKLEY BEDELL, IOWA
CHAIRMAN

NICHOLAS MAVROULES, MASS.
CHARLES HATCHER, GA.
DENNIS E. ECKART, OHIO

United States House of Representatives
Committee on Small Business
Subcommittee on Energy, Environment, and
Safety Issues Affecting Small Business
B-363 Rayburn House Office Building
Washington, D.C. 20515

SILVIO O. CONTE, MASS.
JOHN HILER, IND.
GUY V. MOLINARI, N.Y.

MARC H. ROSENBERG
SUBCOMMITTEE STAFF DIRECTOR
202-225-8944

JAMES M. [illegible]
MINORITY SUBCOMMITTEE COUNSEL
202-225-4841

March 31, 1982

Hon. Charles A. Bowsher
Comptroller General
General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Bowsher:

The House Small Business Committee's Subcommittee on Energy, Environment and Safety has a continuing interest in the issue of waste oil recovery. We have been looking at this subject for several months, and would like the General Accounting Office to prepare a report for use in our investigation.

In 1977 the GAO did a study on "Ways the Department of Defense Can Improve Oil Recycling." Essentially, we would be interested in seeing that paper updated, with a few specific questions addressed.

First, we would like to see a review and comparison of the waste oil disposal/recovery policies of several federal agencies. Besides the Department of Defense, the U.S. Postal Service and the General Services Administration, for instance, maintain large fleets of motor vehicles.

This Subcommittee conducted field hearings in New York City, so we would be interested in having a field audit done of DOD, USPS, GSA and other federal facilities in the New York City area. Perhaps the findings from such a study could be compared to similar data from other areas of the country.

Second, we would like to see a review made of the recommendations contained in GAO's 1977 report. Have the policy changes suggested then been made yet? If so, has implementation been uniform?

Third, we note that new legislation - the Resource Conservation and Recovery Act, and the Used Oil Recycling Act in particular - have come along since the Energy Policy & Conservation Act, which was the focus of GAO's 1977 report. These laws specifically charge the Environmental Protection Agency with the primary responsibility for developing U.S. Government policy regarding waste oil recovery. In evaluating the current practices of the various federal agencies, we would like you to look particularly at what role the EPA has played in developing or reviewing their policies.

Finally, we note that the cover summary on your 1977 report states, "It would be helpful to designate one Federal agency to provide

(continued)

leadership in managing used oil." We would like your agency's assessment of whether EPA or any other agency has actually developed an effective government-wide policy for the handling of used motor oil.

We understand that GAO's Procurement, Logistics and Readiness Division currently is involved in preparing a study of waste oil disposal methods. If integrating our request into this on-going study would expedite matters, we would have no objection to that being done.

If it is at all possible, we would like to receive your report by mid-June, so the information can be put to timely use. Should you have any questions concerning our request, contact the Subcommittee's staff director, Marc Rosenberg, at 225-8944.

Thank you very much.

Sincerely,

BERKLEY BEDELL
Chairman

BB/mhr

APPENDIX M.—PRELIMINARY REPORT RECEIVED FROM GENERAL ACCOUNTING OFFICE, JULY 16, 1982

STATEMENT OF FACTS CONCERNING USED OIL COLLECTION AND DISPOSAL PRACTICES BY FEDERAL AGENCIES

On March 31, 1982, the Chairman, Subcommittee on Energy, Environment, and Safety Issues Affecting Small Business, House Committee on Small Business, asked GAO to examine Federal agencies' used oil collection and disposal practices. Specifically, the Chairman asked us to

--review actions taken by the Department of Defense (DOD) in response to recommendations in our 1977 report on ways the DOD can improve oil recycling;

--compare waste oil recovery and disposal policies of several Federal agencies, including agencies located in the New York City area;

--determine what role the Environmental Protection Agency (EPA) has played in developing Government policy regarding used oil recovery; and

--assess whether the EPA or any other Federal agency has developed an effective Government-wide policy for handling used motor oil.

The information we developed regarding these four matters is discussed below.

ACTIONS TAKEN IN RESPONSE TO RECOMMENDATIONS IN OUR 1977 REPORT

In 1977, we reported that, although DOD, and the military services were concerned with the problems of conserving used oil and reducing pollution, this concern was not always reflected by operations at military installations. Many installations had not

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received guidance from DOD or their respective headquarters or had not implemented the the guidance they did receive. They were using a wide variety of methods to dispose of used oil. There was no systematic method of reporting information to DOD or to the service headquarters on volumes, types, and methods of disposal of used oil. There was no focal point to receive and analyze such information and to devise strategies and policies and issue uniform guidance to DOD agencies.

GAO recommended that the Secretary of Defense:

--Institute an information system to provide a basis for developing policies and procedures for recovering used oil.

--Classify used oil as an accountable asset to better control its disposal.

--Investigate the feasibility of making regional agreements with re-refiners to process used oil into re-usable lubricants.

DOD agreed that used oil should be considered an asset which should be recycled as a lubricating oil when feasible, and that it could manage the product better. It also agreed to evaluate how well its installations recover and reutilize or dispose of waste oil and to improve its policies and procedures where necessary.

DOD felt that, where practical, implementation of a system to segregate and store used oil by physical characteristics, as was being done at some installations, was desirable for local disposal purposes. However, it did not believe developing a centralized DOD-wide used oil collection and segregation system would be economically feasible because activities that generate used oil were widely dispersed and many generated relatively small quantities of used oil.

GAO believed that a segregation and collection system was a practical and necessary link between the initial steps of classifying used oil as an asset and instituting an information system and the final step of re-refining or reprocessing the oil, but did not envision that DOD would develop a physically centralized collection system. We intended that DOD institute a requirement that used oils be segregated and collected by type at its installations. Such segregated collection would enhance the resale and reuse value of used oils, and improve the prospects for regional re-refining agreements by keeping the different types oils uncontaiminated and enabling nearby installations to share collection and storage facilities.

DOD agreed that used oil should be re-refined whenever feasible, but argued that the DOD's use of re-refined automotive engine oil would not be possible until the Army completed its joint evaluation, with EPA and the National Bureau of

Standards, of the feasibility of using such oil. At that time, military specifications for engine lubricating oils prohibited the use of re-refined materials. We agreed with this deferment on the use of re-refined products as automotive oil, but did not view it as an impediment to investigating the feasibility of regional agreements with re-refiners to reprocess other products, such as hydraulic and brake fluids. Automotive engine oils could be included as soon as they met the military specifications.

In June 1979, the DOD established interim oil recycling and reuse policy and guidance for the military departments and defense agencies on how to collect and dispose of their used oils. This policy and guidance essentially implemented the recommendations in our 1977 report. The policy directive recognized used lubricating oil as a valuable natural resource and an asset because it possesses two basic reuse characteristics which offer significant economic benefits: (1) it is a "re-renewable" resource since it can be re-refined and reused repeatedly, or (2) it can be burned as a fuel or fuel supplement to recover its inherent energy. The policy directive recognized that used oil should be utilized to provide the maximum economic benefit consistent with environmental protection, conservation of the U.S.'s rapidly depleting oil reserves, increasing petroleum costs, and the need to comply with both the intent and spirit of recent legislation.

The military departments and defense agencies were directed to take the following actions to accomplish the overall objective of utilizing used lubricating oil as an asset rather than a waste product:

(1) Maximize the recovery and collection of used lubricating oil through reemphasis or modification, if necessary, of current guidelines and procedures.

(2) Maximize the sale through Defense Property Disposal Offices of recovered used lubricating oil for the purpose of re-refining, recognizing that this utilization is the most environmentally acceptable recycling option. If practical, collection, segregation, and storage of the used lubricating oil by physical characteristics and/or type (e.g. crankcase oil, gear lubricant, metal working lubricant, hydraulic oil, etc.) will probably enhance the resale value of the individual stocks. When allowed by military specifications for lubricating oil products, large installations should consider negotiating for "closed cycle" 1/ re-refining arrangements as a method to further enhance the net value of the used lubricating oil and to thereby reduce the cost of replacing the used oil with more expensive virgin lubricating oil products.

1/Collecting used oil, having it re-refined and returned, and using it again.

(3) Recognizing that re-refining may not be economically feasible in some areas of the U.S., burn the used lubricating oil as a fuel or fuel supplement in boilers if no reasonable arrangements can be made for re-refining. Before deciding to burn the oil, the DOD activities were to satisfy themselves that the burning is consistent with the general national conservation principle to conserve our petroleum resources and to preserve the quality of our natural environment.

(4) If not already done, discontinue any current used lubricating oil disposal practices which are not environmentally acceptable, including the use of used lubricating oil for weed control, insect control, dust control, open pit burning, dumping into landfills, sewers, water, etc.

(5) Investigate possible ways to minimize generation of used lubricating oil at the installation level, e.g., through incorporation of technically designed used oil analysis programs into good preventive maintenance scheduling, thus enabling acceptable oil to be used for longer periods.

(6) Encourage voluntary participation of military and civilian employees who change the crankcase oil in their own personal vehicles to deliver the recovered oil to a military collection location as a means of easy disposal, pollution abatement, and effective resource recovery. Cooperative programs

with regional and local business, civic, and governmental organizations were to be considered to increase public awareness and improve the economics of recycling.

The Secretaries of the military departments and directors of defense agencies were required to: (1) insure compliance with overall DOD policy and the specific provisions contained in the policy directive and (2) incorporate summary information into the DOD environmental quality semi-annual management-by-objectives report.

In January 1980, the Army revised its specification for engine lubricating oil for administrative service vehicles to allow use of re-refined oils, provided they meet all standards contained in the specification. Two additional specifications, diesel engine oil and arctic engine oil, are currently being revised to allow use of re-refined products. Scientists at the Army's Mobility Equipment Research and Development Command (MERADCOM), which is responsible for the specifications, told us there is no physical reason why used oil cannot be reprocessed into a product meeting military specifications. In fact, one re-refiner has produced a re-refined oil meeting the specification for administrative vehicles.

DOD officials are concerned that re-refiners may not be able to consistently produce products which meet military specifications. They pointed out that the lubricating characteristics of oil can vary significantly depending on the geographical source of the crude oil from whch they were made. Since re-refiners obtain used oil from many uncontrolled sources, their ability to produce a product which is consistent in quality is a concern. Scientists told us a closed loop system, allowing DOD activities to have their used oil re-refined and returned under contract would do much to eliminate the consistency problem.

Although DOD policy stresses that used oil should be sold for re-refining, current disposal practices do not assure buyers will use it for that purpose. We found that in most instances, used oil was sold to firms dealing in fuel oil, road oiling, or acting as brokers who sell the product for whatever use the buyer wishes. Eleven of the 15 DOD installations we visited were selling their used oil through the DPDS, as opposed to using it as a fuel. The buyers were engaged in the following types of business.

Type of buyer	Number of buyers 1/	Gallons sold	Percentage of total gallons
Re-refiner	1	128,842	22.6
Plastics manufacturer	1	9,033	1.6
Fuel oil sales	6	298,031	52.3
Road oilings	3	2/ 4,600	.9
Broker	1	128,900	22.6
Total	12	569,406	100.0

1/One installation had two buyers; one for synthetic jet oils and one for other used products.

2/Estimated.

Defense installations generally collect their used oil centrally and report it to their local Defense Property Disposal Office (DPDO) for disposal. The Defense Property Disposal Service advertises it for competitive sale and sells it to the highest responsive bidder without restrictions on how it may be used.

Only one of the 15 installations we visited effectively segregated its used lubricating products. In addition to mixing used oils by type, many installations frequently allowed the oils to become contaiminated with such things as water and waste paper.

One storage site at Kelly Air Force Base, Texas, consisted of a concrete slab with a 6-inch high retaining wall. The slab contained about 400 55-gallon drums of used oil which were standing in about 5 inches of oily water. Heat fluctuations had caused the metal drums to expand and contract, absorbing rain water and expelling it as an oily mixture which leaked into a nearby stream. At Fort Belvoir, Virginia, 20,000 gallons of used oil offered for sale was found by the buyer to be 70 percent water. At Fort Campbell, Kentucky, we observed trash floating in a used oil storage tank.

One buyer, who sells to re-refiners, told us that the re-refining process can be adjusted to accommodate some types of mixed products, but used oils that are clean and better segregated produce a re-refined oil of better quality and the economies of the re-refining process are improved. This person told us used oil collected from defense installations is generally of poor quality and that he recently terminated two purchase contracts because the used oil was too dirty to re-refine.

From January 1979 through August 1980, the Defense Property Disposal Office (DPDO) at Kelly Air Force Base sold 17,000 gallons of used jet turbine oil, which had been segregated during collection, at an average price of 66 cents per gallon, with some selling for as much as 90 cents per gallon. Had the jet oil not been segregated, it would have been sold as part of the mixed oils at a much lower price and would not have been recoverable. For example, 263,000 gallons of mixed used crankcase oil, sold by the same DPDO during a similar period average only 14.3 cents per gallon.

At present, the used jet oil is not re-refined, but is used in the manufacture of plastics. However, the Air Force is engaged in research which may lead to the technology needed to restore jet turbine oil to a condition suitable for its original use.

Used oil market value and desirability to re-refiners is also affected by the size of the container used to store it. One buyer told us used oil stored in bulk tanks, as opposed to 55-gallon drums, is generally worth three times more because handling costs are substantially reduced. The buyer indicated he will no longer bid on used oil offered for sale in 55-gallon drums. He believed defense installations should consolidate product collection into bulk storage sites. Consolidated, bulk tank collections are economically attractive to a wider range of buyers, who are likely to bid higher.

A system similar to this has been used successfully at Fort Hood, Texas. The installation has over 100 bulk storage collection points equipped with 500- to 1,200-gallon storage tanks. The post has a contract with a re-refiner who periodically picks up the used oil at each storage site. In addition to getting a better price for the used oil, the installation is avoiding substantial costs that would be required to consolidate the products at one central collection point. Installation officials could provide no specific cost data, but indicated that prior to the current arrangement, 5 to 8 personnel and 2 vehicles had been required to collect and dispose of the used oil.

We believe a practice similar to the one used at Fort Hood may be desirable for geographic areas with concentrations of defense activities. In the Washington, D.C., area, for example, we contacted 7 defense installations that engage in maintenance activities requiring collection and disposal of used oil. These installations were disposing of their used oil through 4 different dealers who engage primarily in fuel sales and road oiling service. The used oil generated by these installations is estimated to range from 600 to 17,500 gallons and total between 32,000 and 36,000 gallons annually. Storage containers ranged from 55-gallon drums to a 12,000-gallon tank.

By offering the used oil generated by these installations, and possibly others in the Washington, D.C., area, and nearby areas for sale collectively, the product is likely to be more attractive to re-refiners and sell for a higher price. By using a term contract for one year or longer with multiple pick-up points, the DPDS should be able to reduce its selling costs and increase sales revenues.

USED OIL COLLECTION AND DISPOSAL BY FEDERAL AGENCIES IN NEW YORK CITY AND OTHER AREAS

After receiving the Chairman's March 31, 1982 request, we reviewed used oil collection, storage, and disposal practices at 15 vehicle and equipment maintenance shops operated by five different Federal agencies in the New York City area. In addition to the military activities discussed in the previous section of this statement, we had also previously reviewed such collection, storage and disposal practices at four maintenance facilities operated by GSA and the Postal Service in the Cincinnati, San Antonio, and Washington, D.C. areas. We found that the practices of the New York City area agencies were typical of what we had observed earlier in other parts of the country. These agencies, whose practices are described below, are:

--The U.S. Postal Service - three vehicle maintenance facilities in Manhattan, Brooklyn, and the Bronx.

--The General Services Administration (GSA) - the New York Interagency Motor Pool in Brooklyn.

--The Federal Bureau of Investigation (FBI) - the New York Field Office garage in Manhattan.

--The U.S. Coast Guard - the auto craft shop, motor pool, and post exchange service station on Governors Island.

--The Department of the Army:

(1) Fort Hamilton, Brooklyn: the motor pool, heavy equipment shop, post exchange service station, and auto craft shop.

(2) Fort Totten, Queens: the maintenance facility.

(3) Fort Wadsworth, Staten Island: the maintenance facility.

(4) Floyd Bennett Field, Brooklyn: the maintenance facility.

The 15 shops performed routine preventive maintenance of motor vehicles and, in some cases, small equipment such as lawn mowers. At the Coast Guard, we observed a facility that collects and stores contaminated diesel oil from various watercraft.

The used oil collection and storage facilities at all 15 activities appeared to be generally clean and well kept, and the storage containers that were observable showed no signs of leaking or spillage. Personnel at most facilities told us that their waste products contain no hazardous materials such as polychlorinated biphenyls (PCBs). Our work did not include an attempt to analyze the hazardous waste content of the used oil; but used lubricating oils from gasoline engines do contain some heavy metal, such as lead, which is designated as a hazardous material by the Environmental Protection Agency (EPA).

Except for the FBI, all the agencies we visited have provided their maintenance personnel with some guidance on how to collect and dispose of used oil. This guidance was very general, and provided few specific procedures. Most of the agencies do not maintain records on how much waste oil they collect or dispose of. We were able to obtain some figures based on estimated maintenance workloads for motor vehicles and from receipts from used oil collectors.

The maintenance activities disposed of used oil by selling it, giving it away, or using it as a fuel oil supplement. The companies that buy oil or have it given to them generally appear to be brokers who resell the oil.

The following table summarizes selected data on the activities we visited.

Agency	Number/type activity	Potential workload	Gallons collected calendar year 1981	Method of disposal
Postal Service	3 Maintenance facilities	1,674 vehicles	6,980 a/	Sold
GSA	1 Motor pool	2,157 b/ vehicles	— c/	Given away
FBI	1 Garage	300 d/ vehicles	1,100 e/	Given away
Coast Guard	3 Maintenance facilities	200 vehicles 20 d/ vessels	14,888 e/	Given away
Army	7 Maintenance facilities	444 vehicles	2,265 f/	Given away, used as fuel supplement, and sold

a/Actual, based upon sales receipts

b/Total motor pool fleet--not all vehicles are serviced at this facility

c/Information not available

d/Approximate number

e/Estimated

f/Based only upon actual receipts and estimates provided by Fort Hamilton for the 265 vehicles it services. Other Army facilities had collected oil on hand during our visits but did not keep collection statistics

The following case summaries provide more specific information about used oil collection, storage and disposal practices at each of the agencies we visited.

Postal Service

There are four vehicle maintenance facilities and two auxiliary garages that service Postal Service vehicles in New York City. We visited the three largest facilities - Manhattan, Brooklyn and the Bronx.

Postal Service guidance on waste oil is limited to some general requirements in its Fleet Management Handbook, which states that

--inflammable liquids should be stored in tanks, approved safety containers, or closed drums;

--engine oil should not be dumped in any sewer or other public drainage system; and

--when possible, waste oil should be sold for recycling.

All three facilities collect used oil in drain pails and transfer it directly to holding tanks. Various other liquids, such as brake fluid and transmission fluid are stored in the same tanks. All the facilities were generally clean and orderly; we did not see any evidence of contamination. Personnel told us that no PCBs are mixed with these liquids. Used cleaning solvents are retained in a special sink, and disposed of monthly by a contractor who is paid to remove them.

The used oil from these facilities is sold to a broker, who in turn re-sells the product. For calendar years 1980, 1981 and 1982 (through April), the table below shows approximate amounts of used oil sold by each facility, based on available documentation.

Facility	1980	1981	1982
	--------(gallons)---------		
Manhattan	4,562	5,040	1,030
Brooklyn	1,190	1,270	375
Bronx	N/A	670	175
Total	5,752	6,980	1,580

For the above period, the Postal Service received an average of about 15 1/2 cents per gallon, or a total of about $2,243.

GSA

GSA operates vehicle maintenance facilities at a main motor pool in Brooklyn and at a subpool at John F. Kennedy Airport. These facilities do routine preventive maintenance on GSA-owned vehicles. They collect, store and dispose of such products as used lubricating oil and brake and transmission fluids.

We visited the main motor pool maintenance facility in Brooklyn which is responsible for 2,157 vehicles; 2,098 of which are permanently assigned to other Government agencies. Many GSA and agency drivers have their vehicles' oil changed at commercial garages, which retain and dispose of the used oil.

We attempted to determine how much waste oil the GSA facility collected and disposed of during the last 3 calendar years, but found that available records were incomplete. We found the facility had given 250 gallons of waste oil to a collector on January 26, 1982, and had an additional 550 gallons on hand. GSA personnel said that the facility has always given its used oil away or paid someone to remove it.

We toured the facility and observed how the waste products are collected and stored. Used oil is initially drained into portable, 5-gallon drain pails and then stored in 55-gallon drums until picked up by the collector. We were told that the waste products collected contain no hazardous materials, such as PCBs. We found the maintenance facility to be clean and well kept. The storage drums showed no signs of leakage.

FBI

The FBI operates one vehicle maintenance facility in New York City. This facility performs routine preventive maintenance for about 300 vehicles. The lubricating oil in these vehicles is changed approximately four times a year, or once every 4,000 to 6,000 miles. In addition to the used engine oil, some waste transmission and brake fluids are also collected. The facility does not maintain records of the used oil or other fluids taken from the vehicles, but FBI personnel estimated that about 1,100 gallons are collected annually.

The waste products are stored in 55-gallon drums until given, free of charge, to a local waste oil collector, who re-sells the oil. We saw no indication of leakage or contamination. The collector has a New York State Department of Environmental Conservation license which allows him to transport used oil.

Coast Guard

The Coast Guard activities at Governors Island generate and collect waste oil from automotive and other maintenance facilities and vessels. The waste products are kept at three different storage areas. Waste oil generated by the motor pool and auto craft shop and bilge oils from vessels are stored in the Coast Guard Support Center's main storage facility. The bilge oils are first processed through a water separator. The industrial shop and post exchange service station collect waste oil, but provide their own storage.

According to Coast Guard officials, approximately 15,000 gallons of waste oil were collected at Governors Island during calendar year 1981 - 11,800 gallons at the main storage area, about 1,000 gallons at the post exchange, and about 2,100 gallons at the industrial shop. All of the waste products are given, free of charge, to a local waste oil collector.

The motor pool facility maintains approximately 200 Coast Guard vehicles. In addition to waste oil, it also collects used brake and transmission fluids, and some cleaning solvents. The waste oil and the brake and transmission fluids are first stored together in 55-gallon drums until moved to the Support Center's main storage area for disposal. The cleaning solvents are stored separately. Waste oil collected by the auto craft shop is first stored in a 200-gallon tank trailer until transferred to the main storage area. The industrial shop, which maintains ship engines, and the post exchange service station store their waste oils in underground tanks, until picked up by the waste oil collector.

All of the facilities that we saw appeared to be clean and well kept. There were no signs that any of the storage containers leaked, or that there was significant spillage. We were told that none of the waste oil collected at Governors Island contains hazarddous material.

U.S. ARMY

We visited Army vehicle maintenance activities at Fort Hamilton, Fort Totten, Fort Wadsworth, and Floyd Bennett Field. These installations include both active duty and reserve activities and their maintenance shops service administrative and tactical type vehicle.

Fort Hamilton

At Fort Hamilton the post motor pool, heavy equipment shop, post exchange service station, and auto craft shop all collect, store, and dispose of used petroleum products. We visited all of these activities, except the auto craft shop.

The post motor pool provides routine preventive maintenance, including engine oil changes, for 191 vehicles. Other maintenance services produce some waste brake and transmission fluids. All of the waste products are stored in one 275-gallon underground tank until disposal. Post motor pool personnel told us the waste products are usually given, free of charge, however we found that some is used as a fuel supplement. Available records indicated that the motor pool disposed of about 780 gallons of used oil, of which 560 gallons were given to a used oil collector during 1981.

The motor pool maintenance shop appeared to be relatively clean and well kept; however, we did notice some evidence of spills around the fill pipe going into the underground tank. Motor pool personnel told us that these spills are routinely treated with chemicals which absorb the oil. We were also told that none of the waste products collected by the motor pool are contaminated with hazardous materials.

The heavy equipment shop services 112 pieces of industrial type equipment, including garbage trucks, dump trucks, tractors, and large lawn mowers. The waste oil collected from this equipment is stored in 55-gallon drums until disposal. This waste oil is turned over to the heating shop for use as fuel. The heavy equipment shop keeps no records on the amount of used oil it collects, but estimates that it disposes of about 275 gallons a year.

The post exchange service station is a non-appropriated fund activity which provides engine oil changes and vehicle lubrication service to authorized customers. It stores used oil in a 550 gallon underground tank until disposal. The exchange sells its used oil to a local collector who pays from 5 to 15 cents a gallon. It kept no records of how much oil it has sold, but estimated that it disposes of about 1,100 gallons a year. The exchange's maintenance area was very clean and well kept. We saw no indications that the waste oil is being improperly stored.

Fort Totten

The post motor pool at Fort Totten provides routine preventive maintenance for 50 vehicles. The used oil collected from these vehicles is stored in 55 gallon drums until disposal. The motor pool kept no records of the quantity of used oil it collects, but personnel estimated that they generate about 300 gallons per year. Disposal is made through the Defense Property Disposal Office at Bayonne, New Jersey, which arranges for a buyer to pick the used oil up at Fort Totten.

The maintenance facility was clean and well kept. There were eight drums of used oil on hand at the time of our visit. The drums were sealed and showed no signs of leakage.

Fort Wadsworth

Two Army reserve units use the maintenance shop at Fort Wadsworth to perform vehicle maintenance requiring collecting, storing, and disposal of waste oil. The used oil is stored outdoors in 55-gallon drums until disposal. The facilities manager did not know if the used oil is free of toxic materials and other contaminants.

The facilities manager told us that the shop services about 40 vehicles. He had no records on the collection or disposal of used oil. Collected oil is stored in 55-gallon drums in an outdoor storage area. We saw no evidence that the drums leaked. There were ten 55-gallon drums, which the facilities manager believed had accumulated over about 9 years. The facilities manager told us he will dispose of the used oil as soon as he can determine the appropriate disposal procedure.

Floyd Bennett Field

We visited the Area Maintenance Support Activity and two Army reserve units, located at this installation. On drill weekends, reservists use the Support Activity facilities to do routine vehicle maintenance, including oil changes. The reserve units have 89 vehicles assigned to them. Reserve representatives told us that while they mix brake and transmission fluids with used engine oil, they do not mix in any toxic materials or PCBs. The used oil is stored in an outdoor 500-gallon holding tank. The shop and yard area were clean and well kept. We saw no evidence of contamination or leakage.

The Support Activity moved from Fort Tilden about 2 years ago. When the activity was at that location disposals were arranged through the Defense Property Disposal Office at Bayonne, New Jersey. Officials told us that they had made no disposals since moving to Floyd Bennett Field. We found the holding tank to be nearly full. Records are not maintained, nor could officials provide a reasonable estimate of the amount of used oil collected.

ROLE OF THE ENVIRONMENTAL PROTECTION AGENCY

As a result of the Resource Conservation and Recovery Act of 1976, the Environmental Protection Agency (EPA) has developed and promulgated a series of regulations designed to assure safe and effective management of hazardous waste materials. One of these regulations requires that the Agency publish a list of identified hazardous waste materials.

According to the EPA Environmental Protection Specialist, with whom we met, used oil is currently not listed as a hazardous waste. This official informed us that oil alone is not considered hazardous, but in use it can accumulate other materials, such as heavy metals and polychlorinated biphenyls (PCB), which are hazardous materials.

As a result of the Used Oil Recycling Act of 1980, EPA is currently sponsoring several research projects which are expected to provide the information needed to determine whether used oil should be classified as a hazardous waste. We were told that preliminary results of some of this work indicate adulteration of used oil with hazardous waste materials appears to be the norm rather than the exception. One of the research projects involved examination of used oil samples obtained from 15 commercial firms. All samples contained high concentrations of heavy metals and PCB's were found in 3 cases. Other research will address the significance of environmental impact from disposing of used oil through such methods as burning and road oiling. This research is scheduled to be completed by the end of 1982. Proposed regulations are expected to be available for evaluation in the summer of 1983, and implementation should follow a year later, in the summer of 1984.

FEDERAL USED OIL POLICY

There are no formal Government-wide policy statements or regulations which specifically dictate how Federal agencies must handle their used oil. Most Federal environmental protection and resource conservation laws passed since 1970, which Federal agencies and the general public are required to obey, have repeatedly emphasized that used oil re-cycling, especially re-refining, that is carried out in an environmentally sound manner, is in the best national interest. Since, these laws primarily address protection of the environment and public health, any used oil conservation achievements will be a by-product of efforts in these areas.

The extent of policy guidance on the handling of used oil issued by individual Federal agencies varies, based on the agencies we visited. We found that the waste oil recovery and disposal policy at most of the agencies we visited recognized the importance of environmental protection and resource conservation, but provided little or no specific guidance on how to handle used oil. The DOD policy and guidance statement, discussed previously, is an exception.

The Postal Service policy statement stresses the importance of safety. It requires all flammable liquids, including used oil, to be stored in safety containers and prohibits disposal through sewers or public drain systems. The policy statement also encourages the sale of used oil to recyclers. GSA's policy statement requires that all used oil be sold to recycling companies. The Coast Guard has instructed its maintenance facilities to dispose of their used oil in accordance with applicable State and Federal regulations. The FBI had no formal policy for used oil disposal.

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